

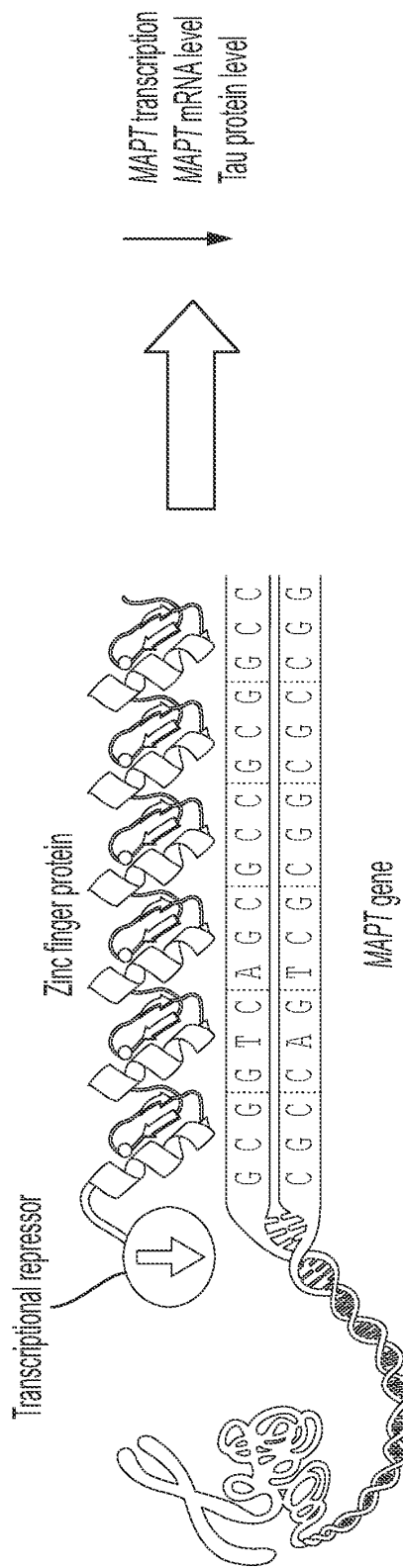


FIG. 1

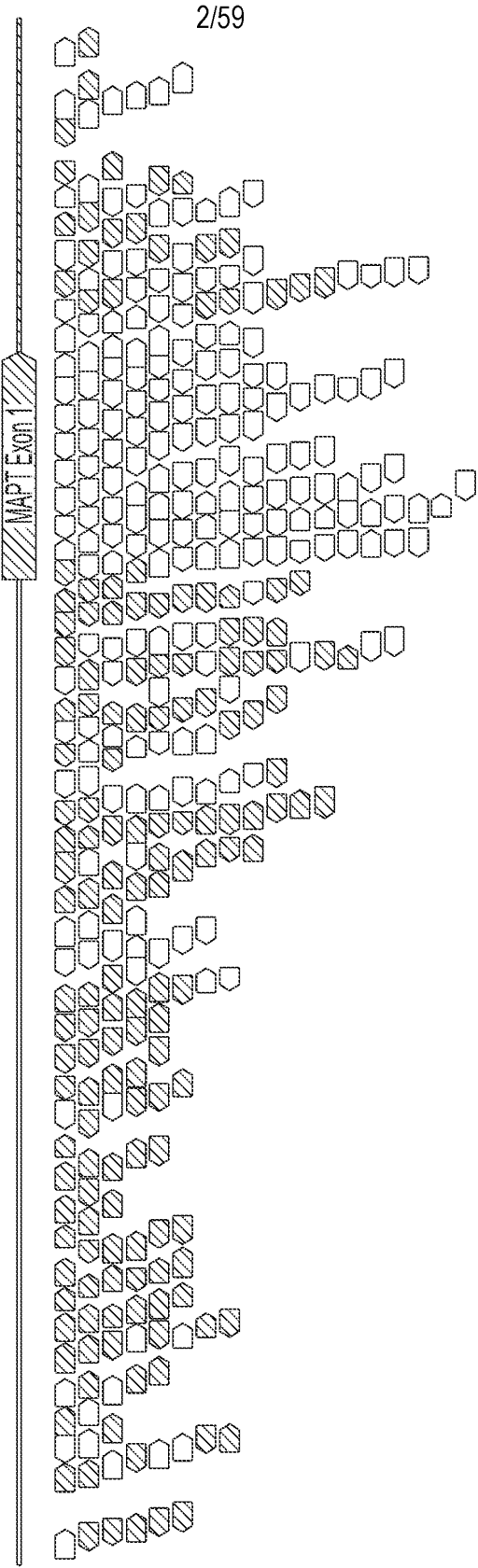


FIG. 2

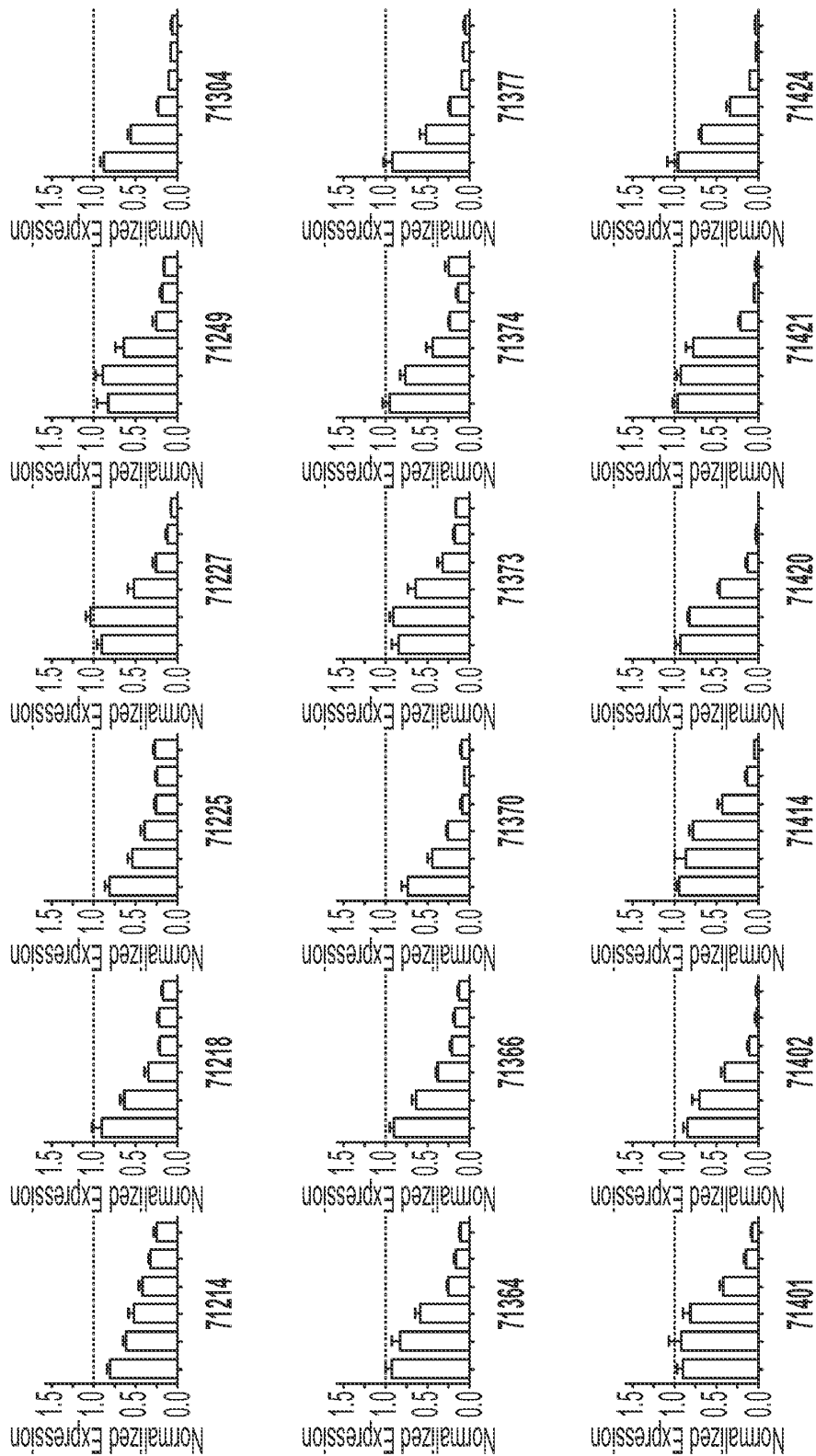


FIG. 3

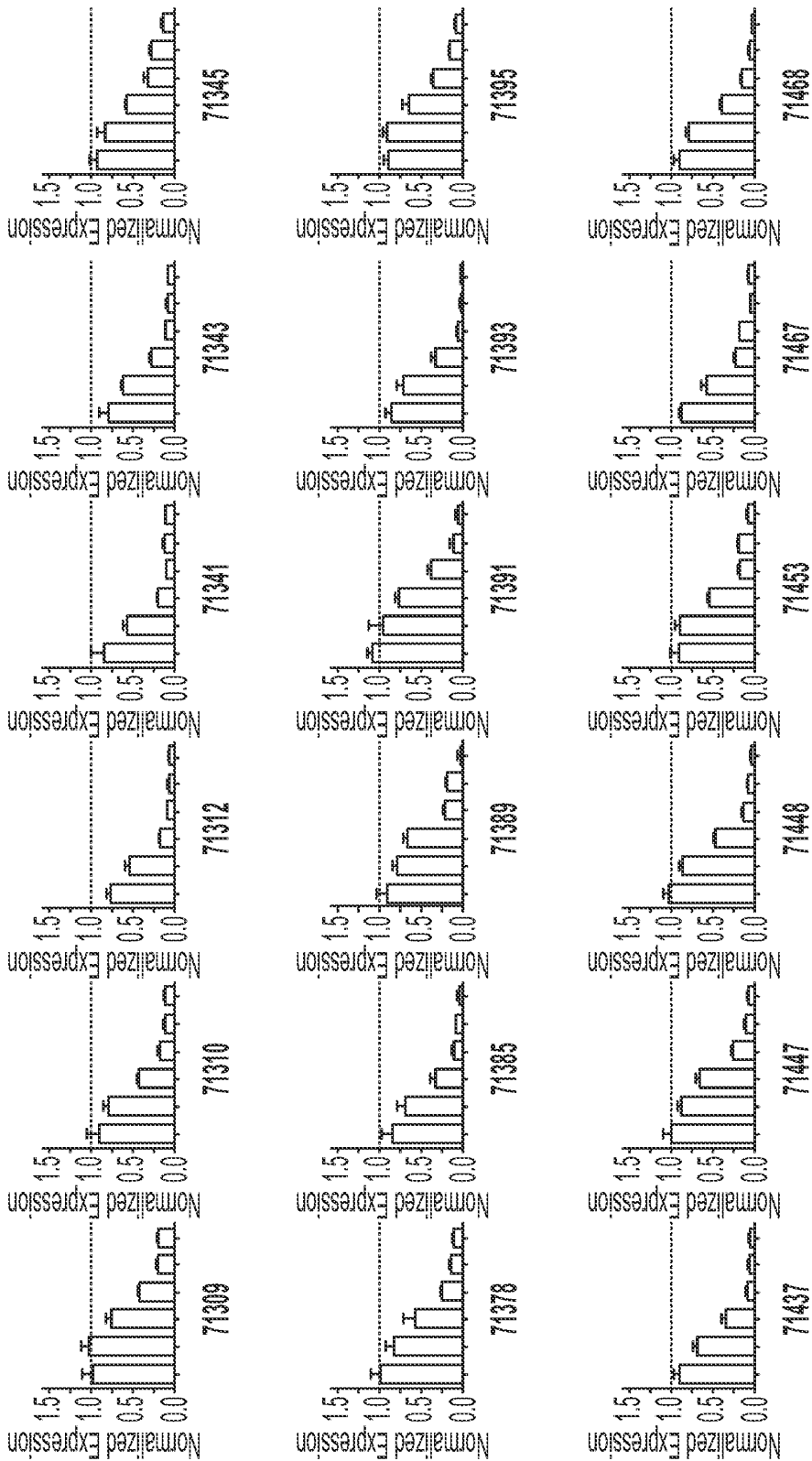


FIG. 3
Continued

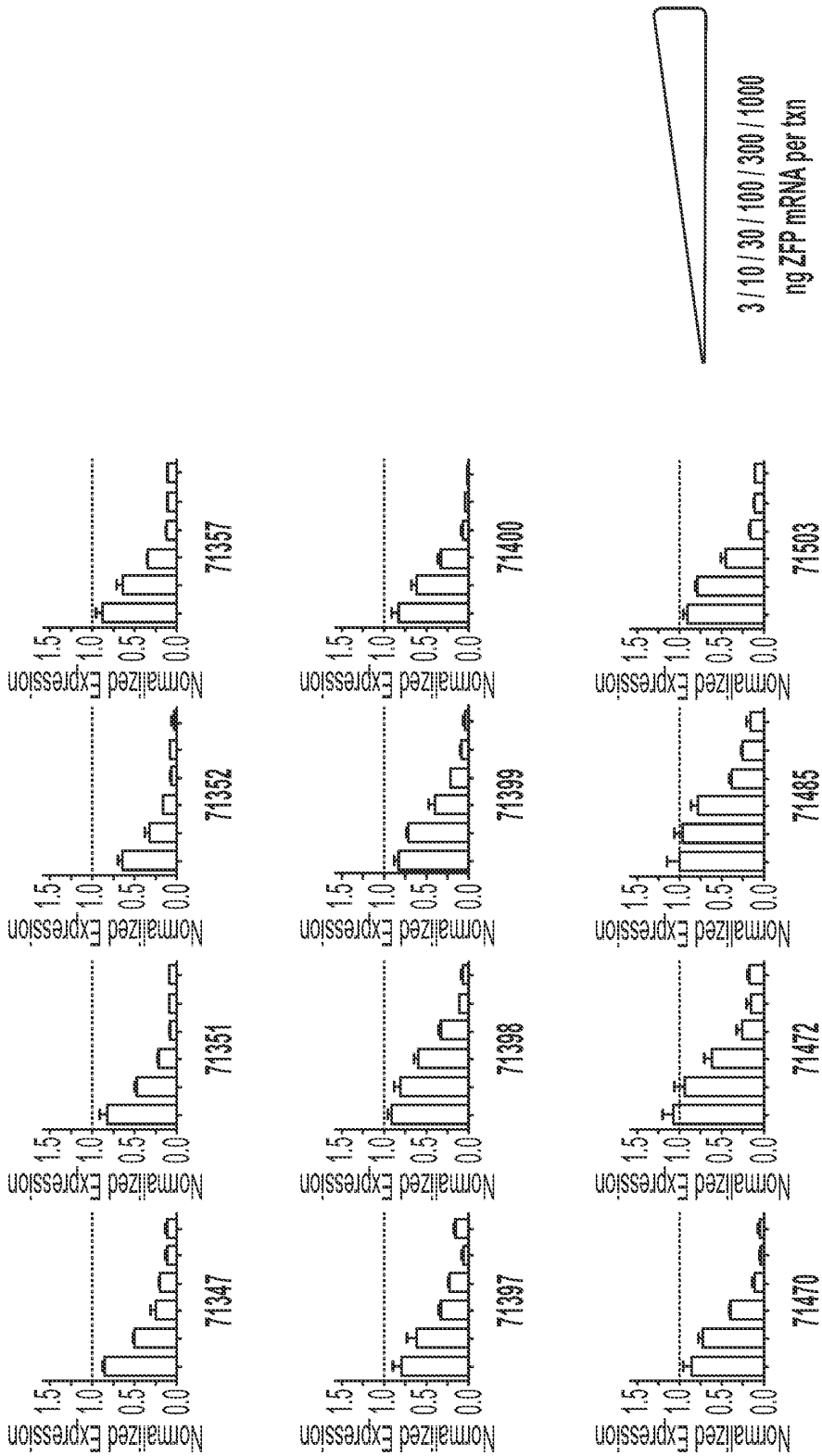


FIG. 3
Continued

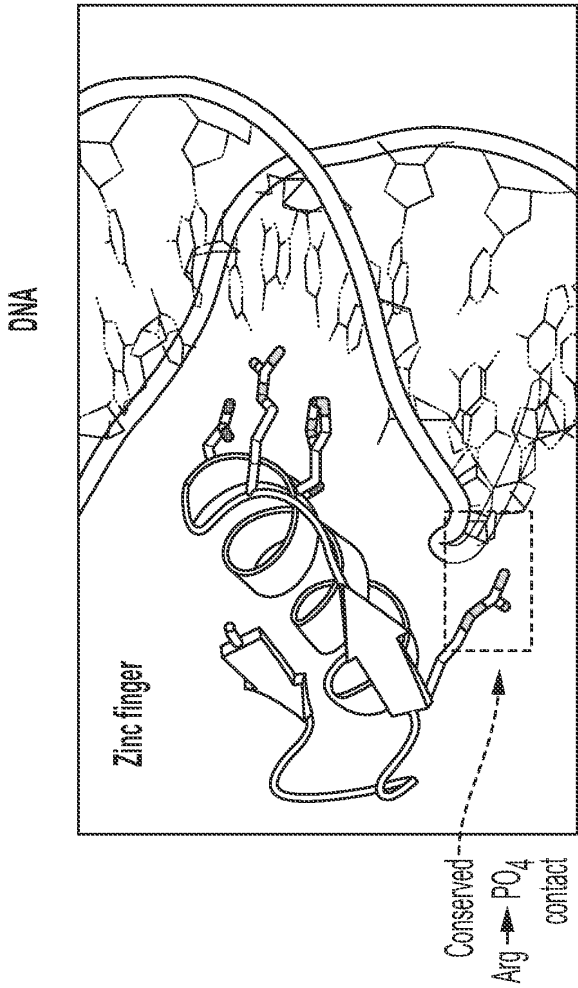
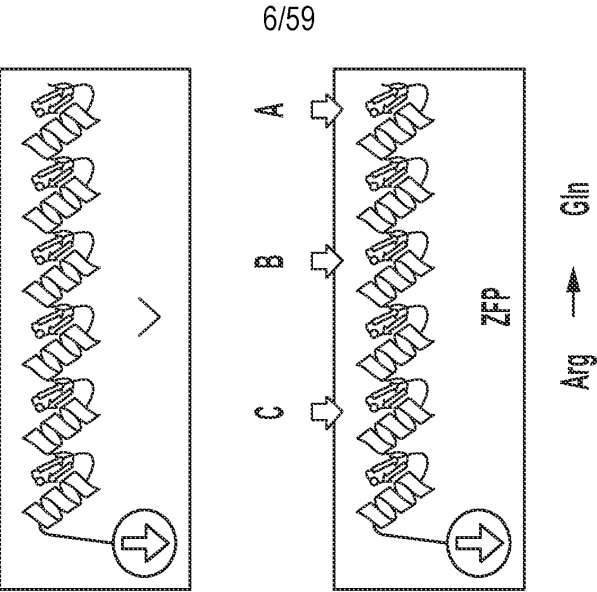


FIG. 4

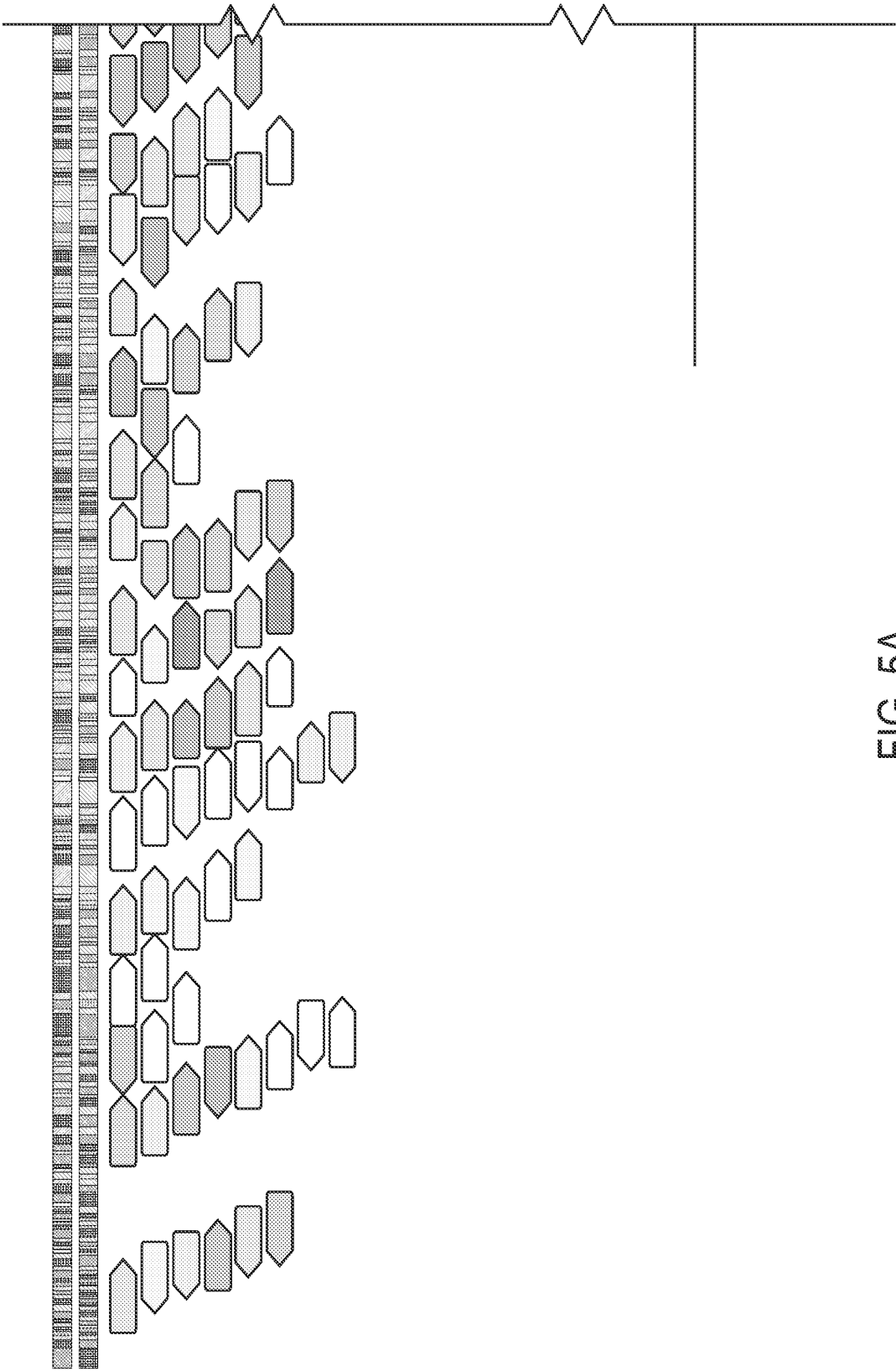


FIG. 5A

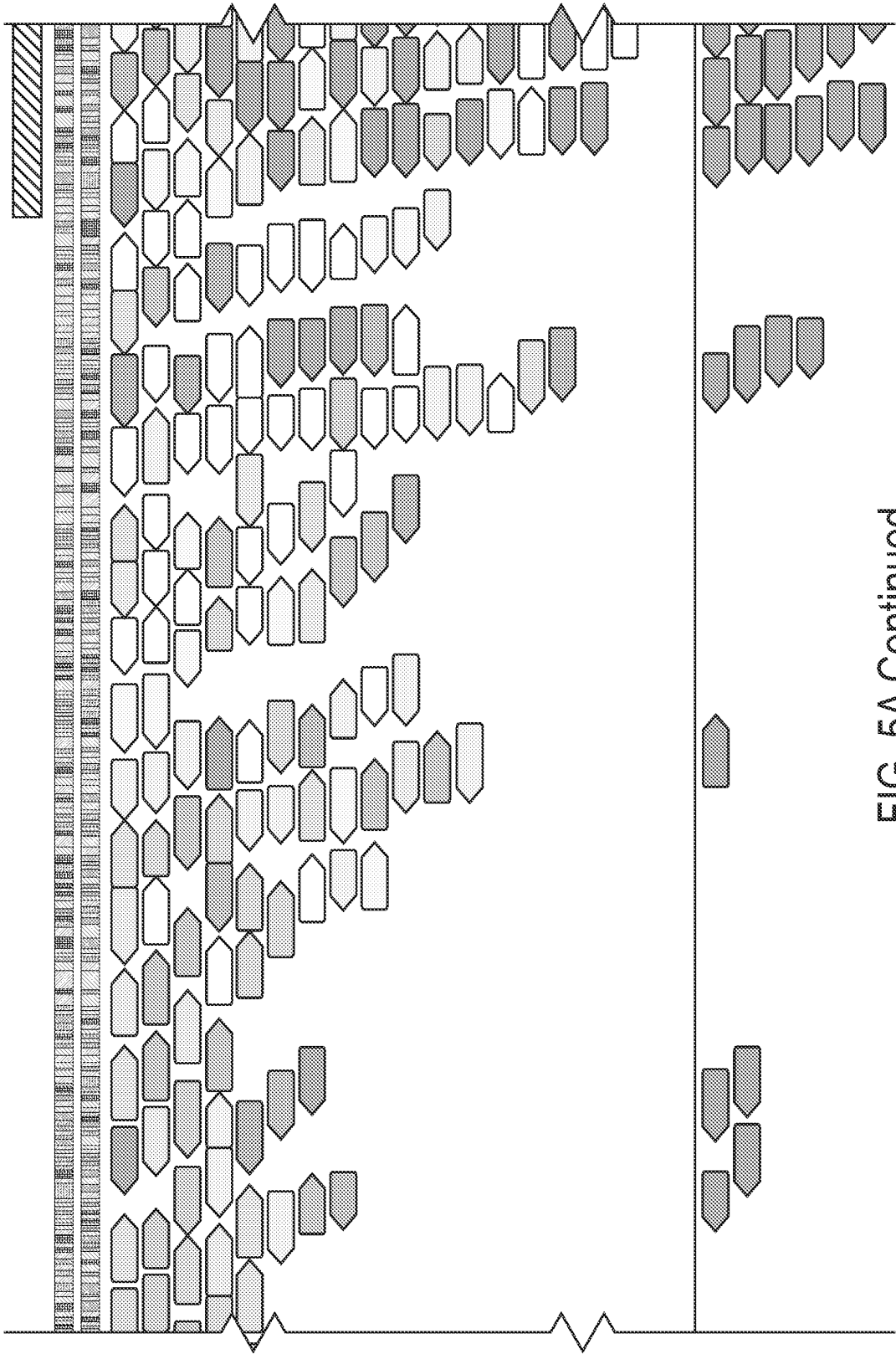


FIG. 5A Continued

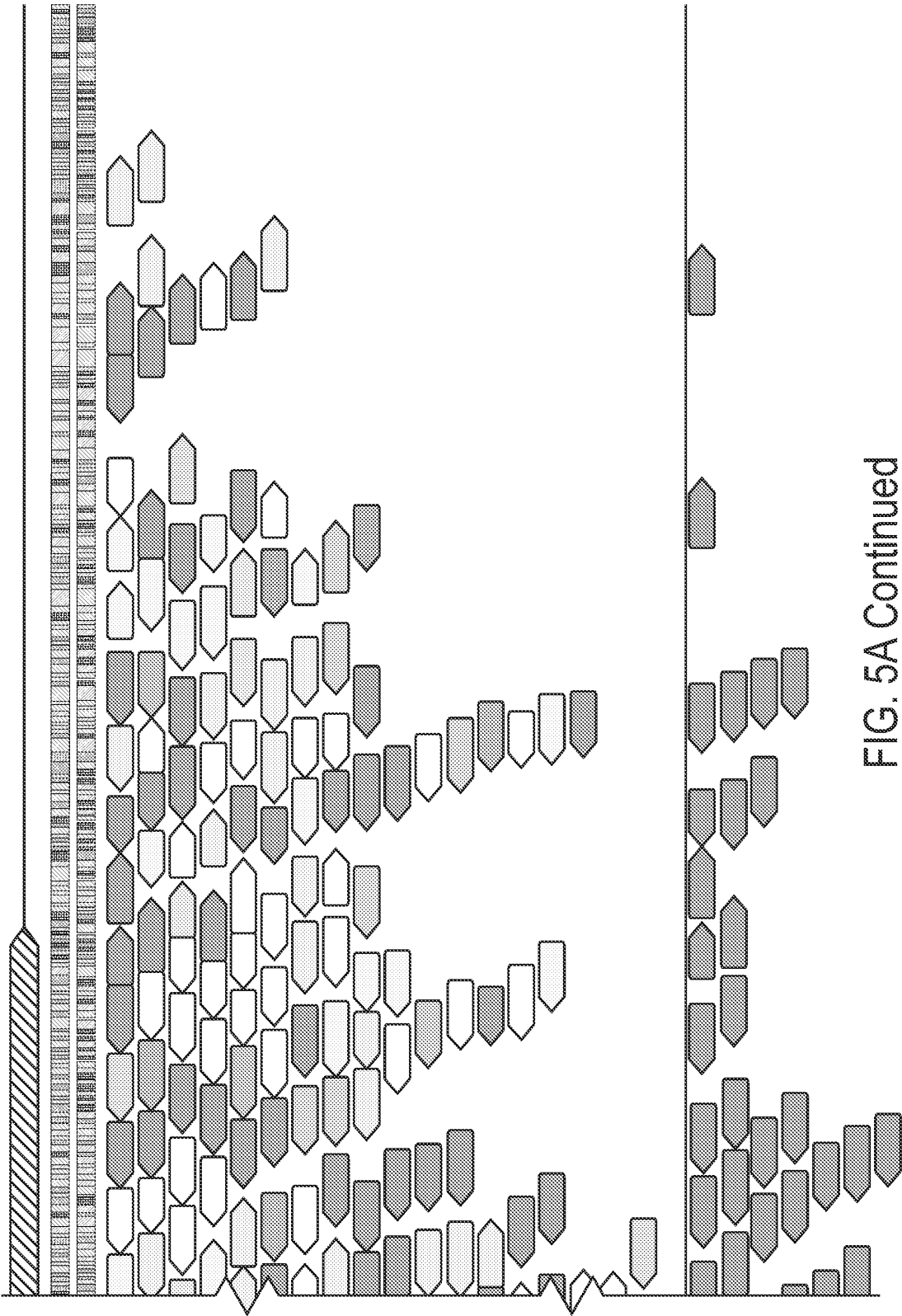


FIG. 5A Continued

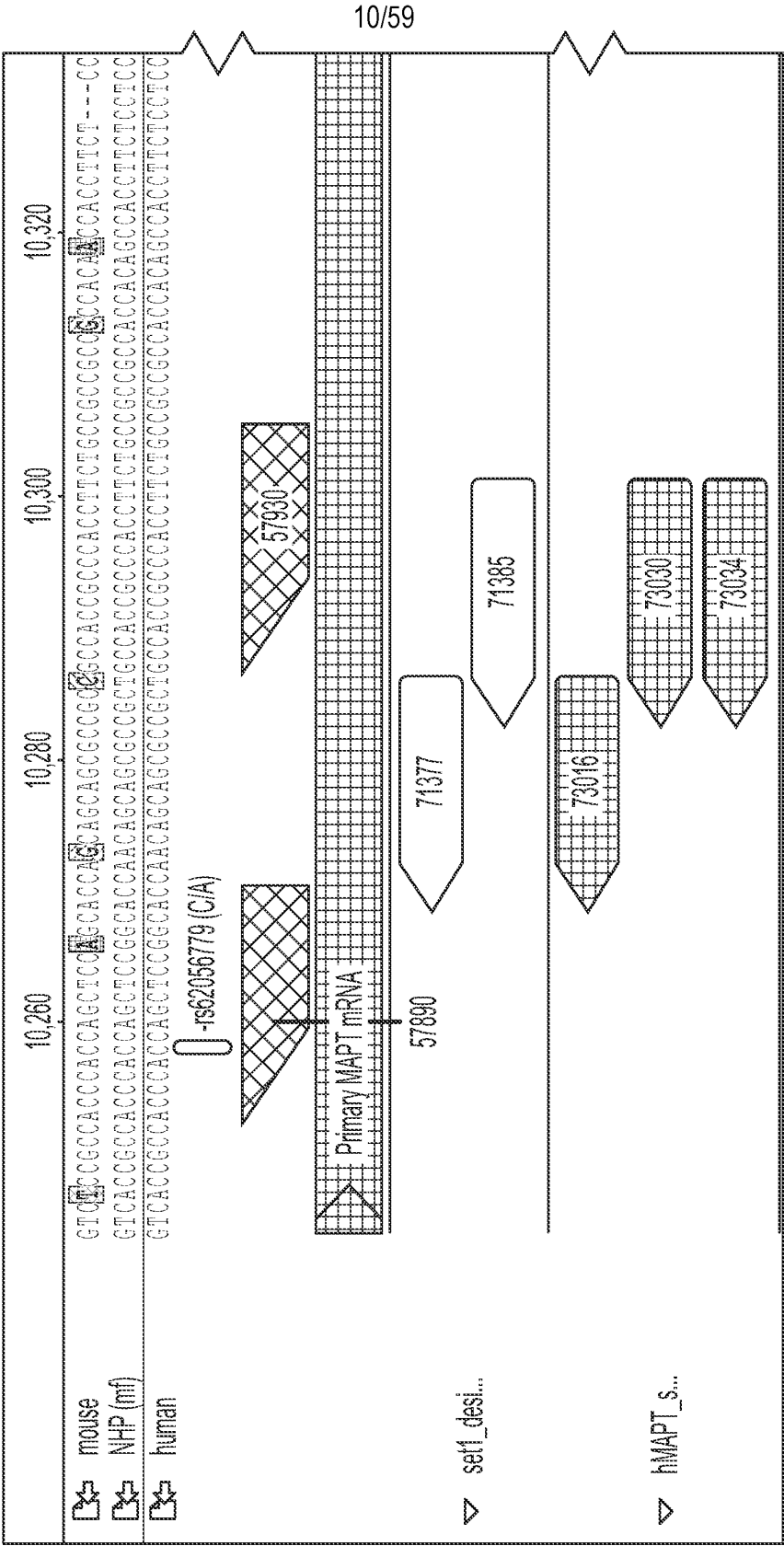


FIG. 5B

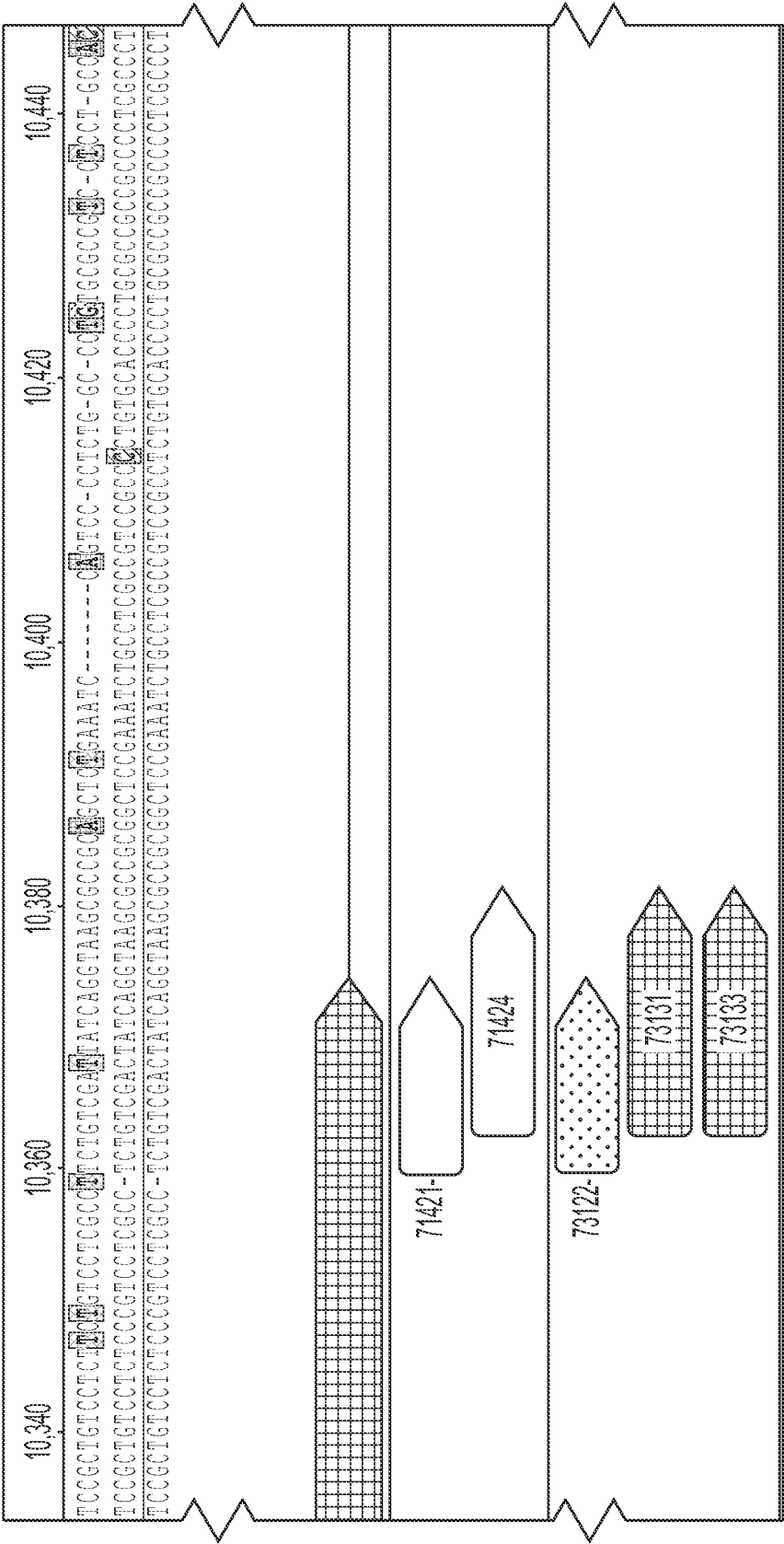


FIG. 5B
Continued

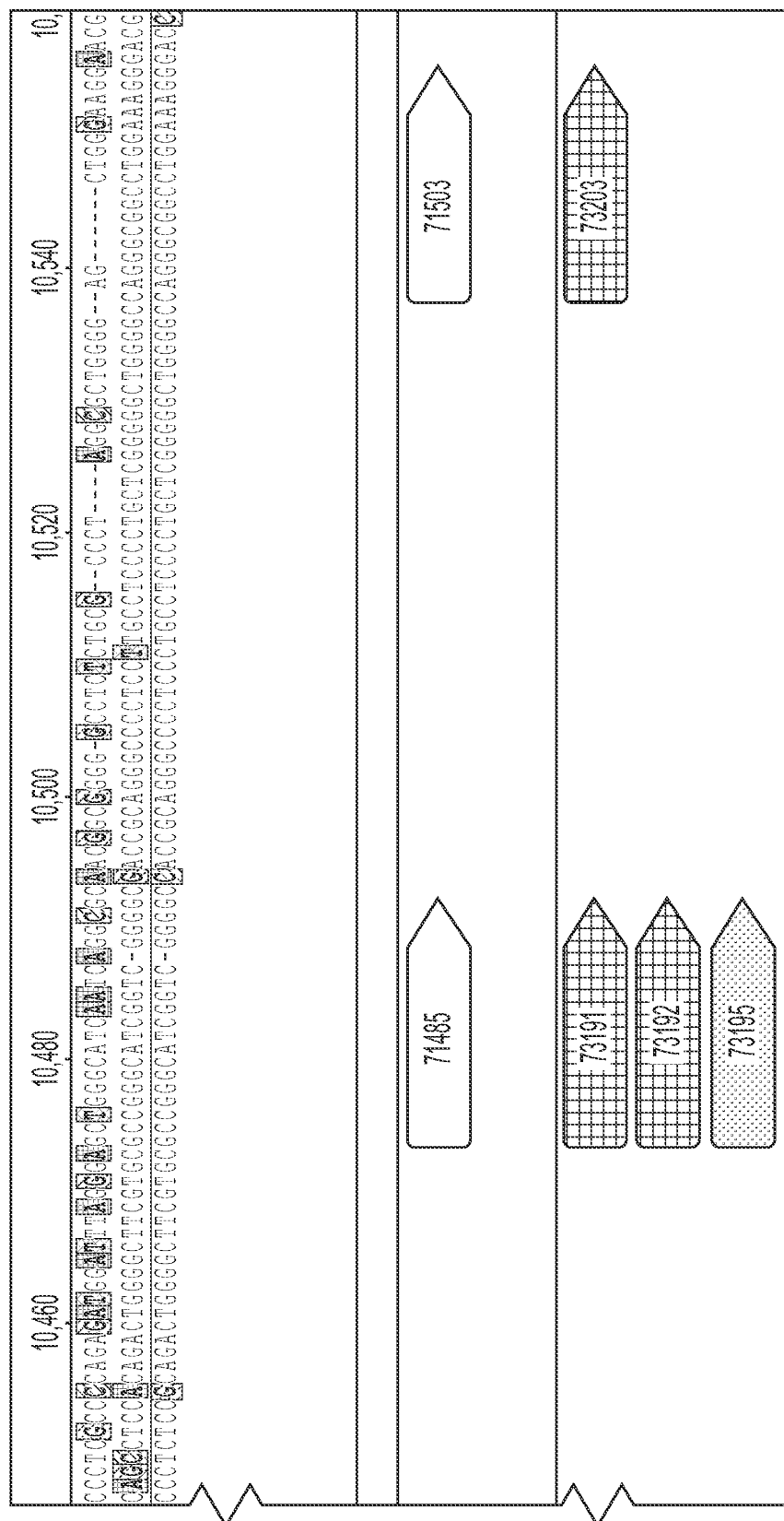


FIG. 5B
Continued

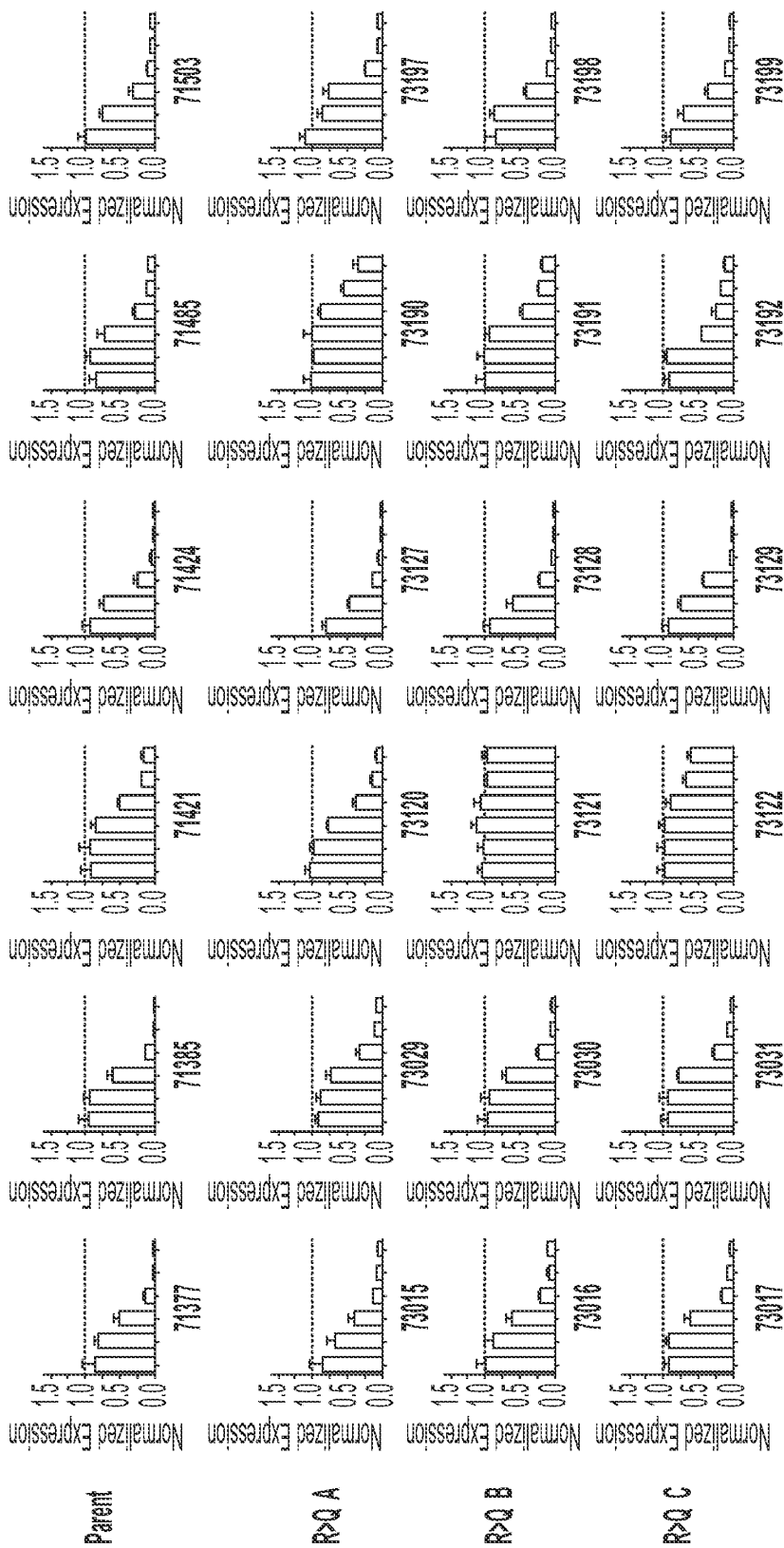


FIG. 6

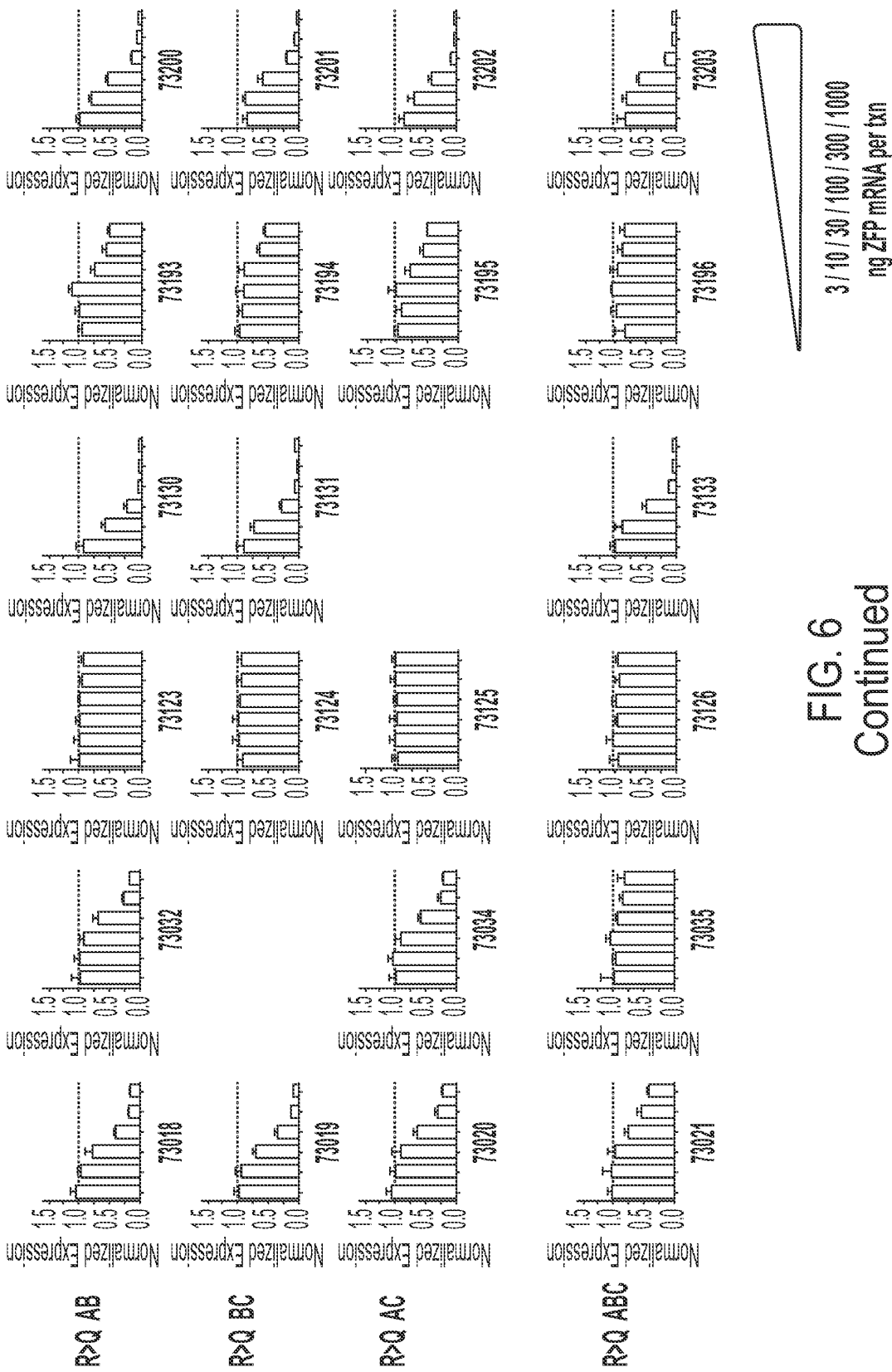
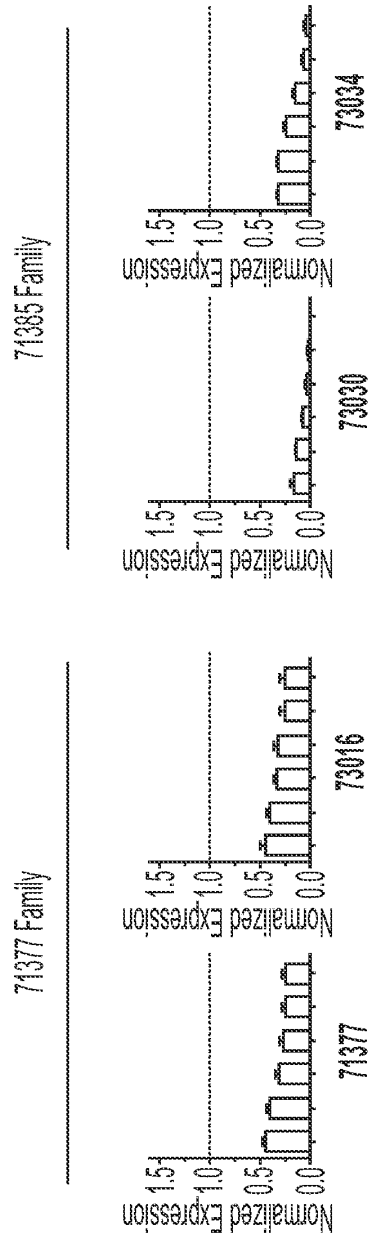


FIG. 6
Continued



71424 Family

71485 Family

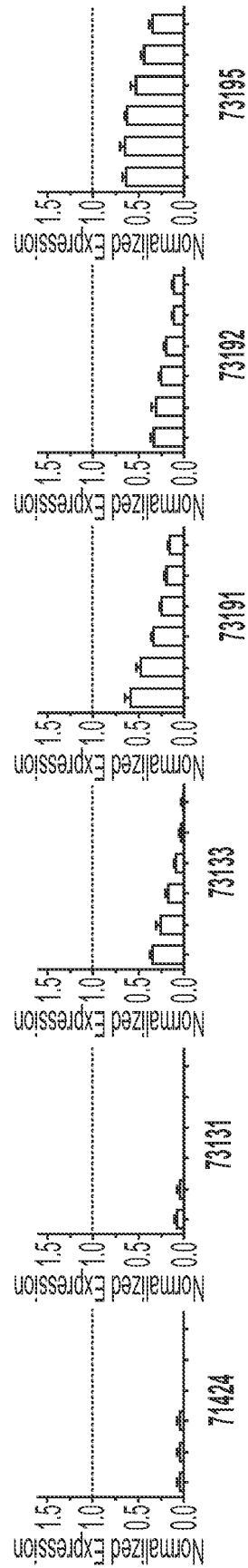


FIG. 7A

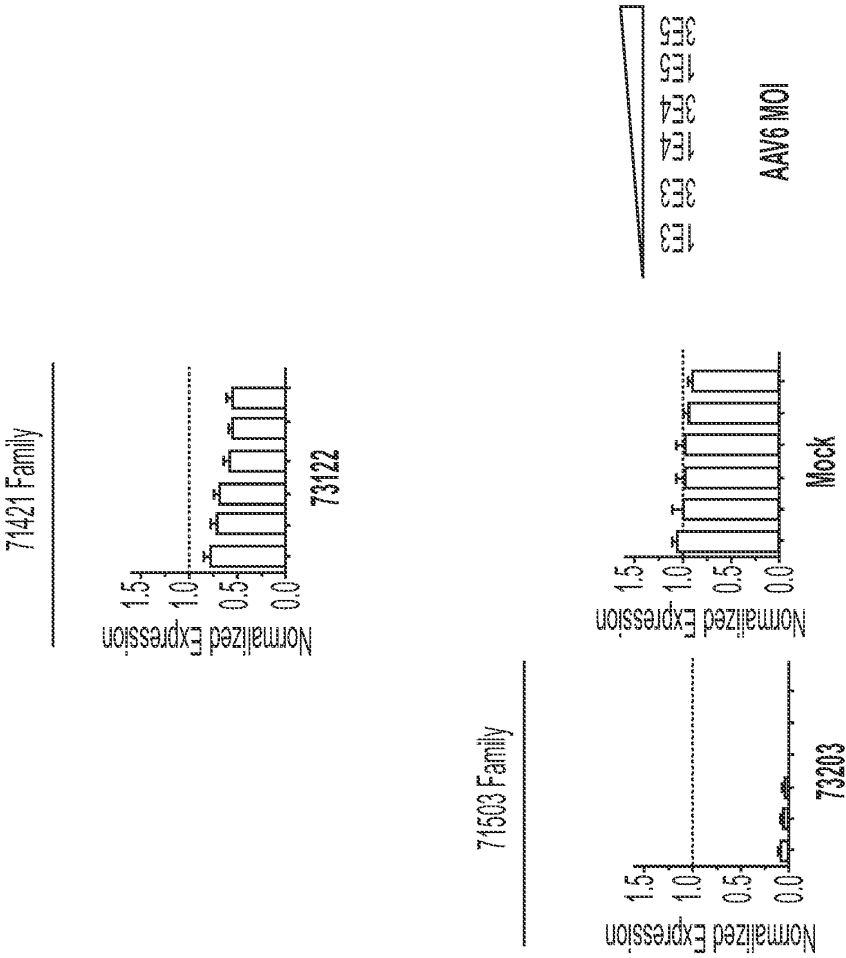
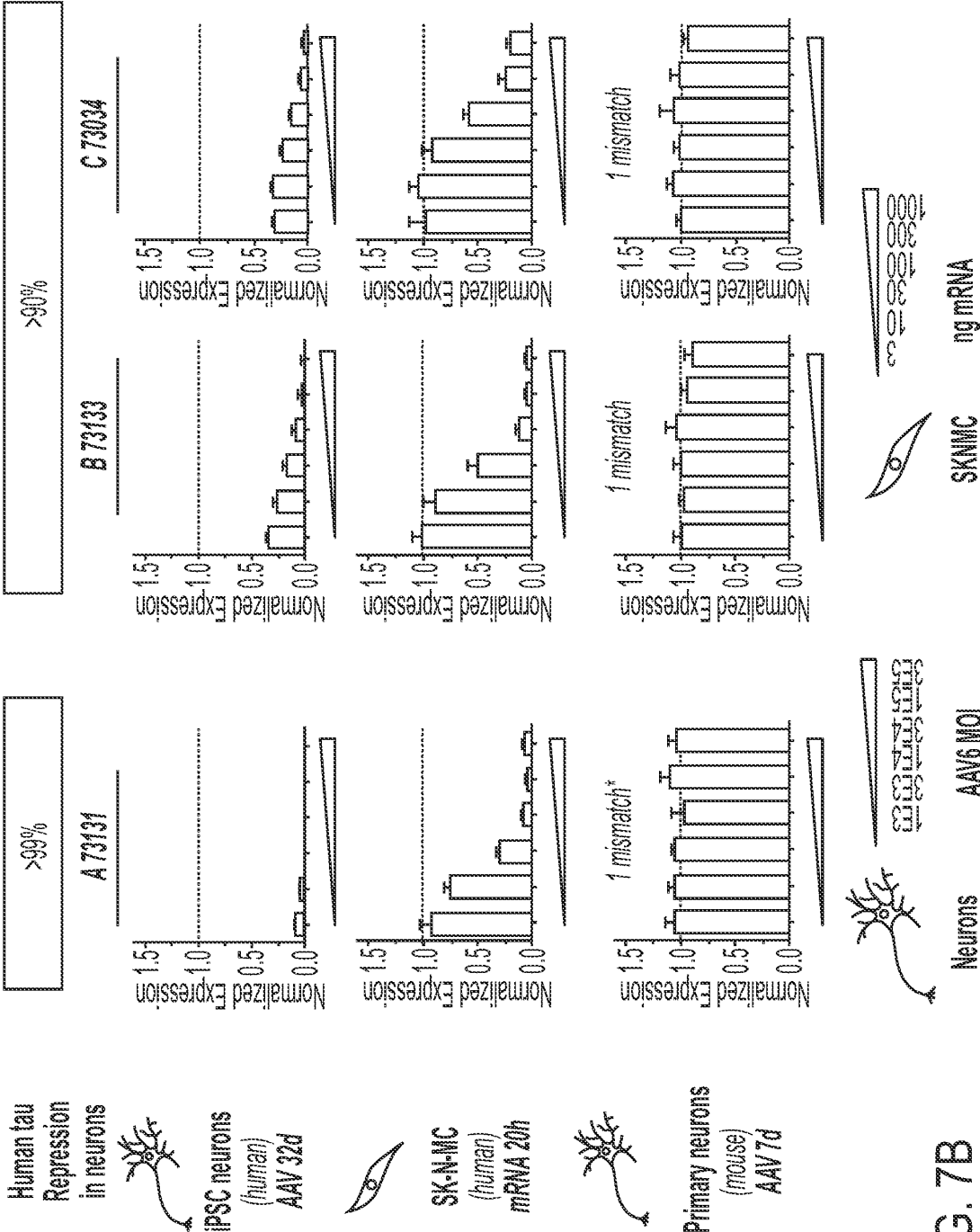


FIG. 7A
Continued



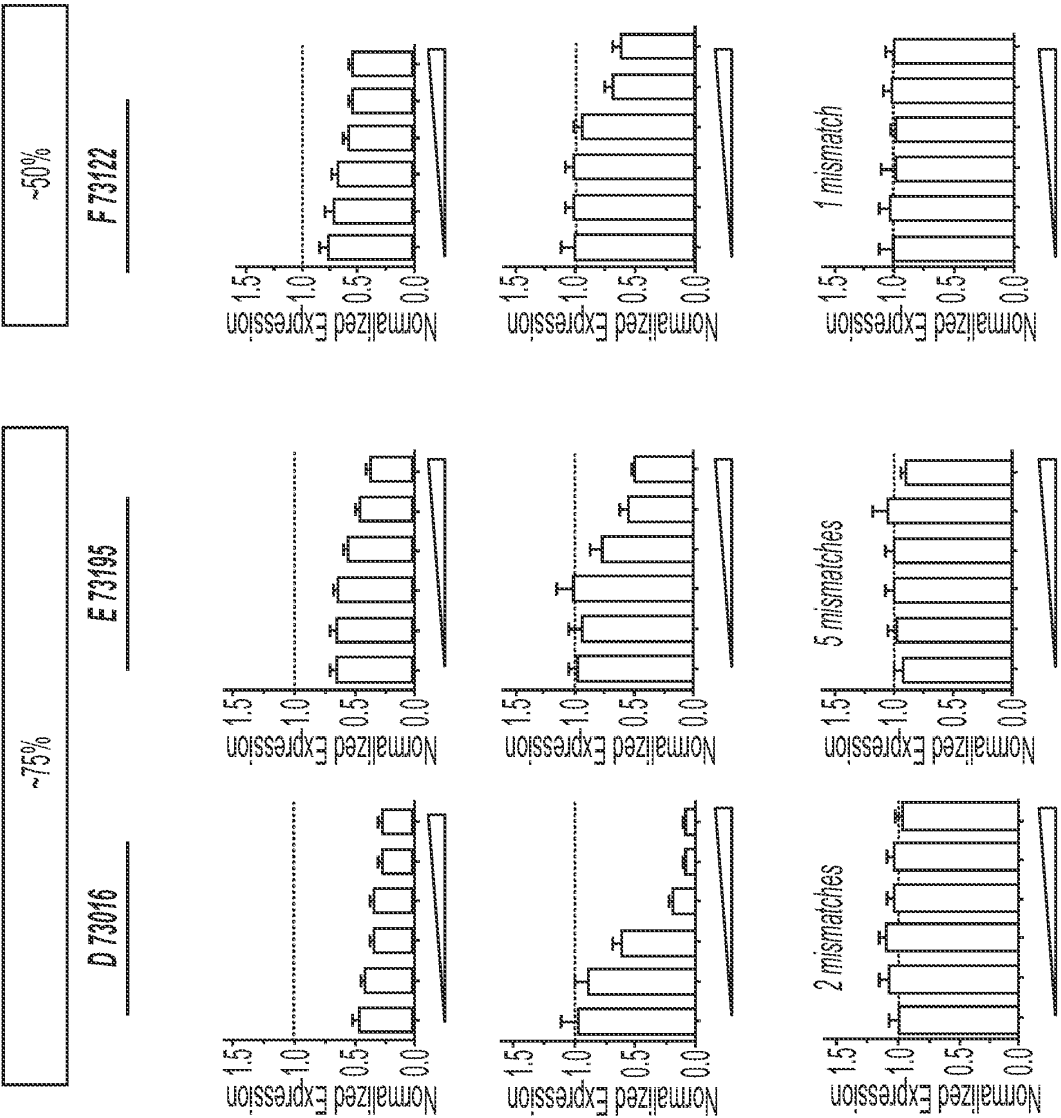


FIG. 7B
Continued

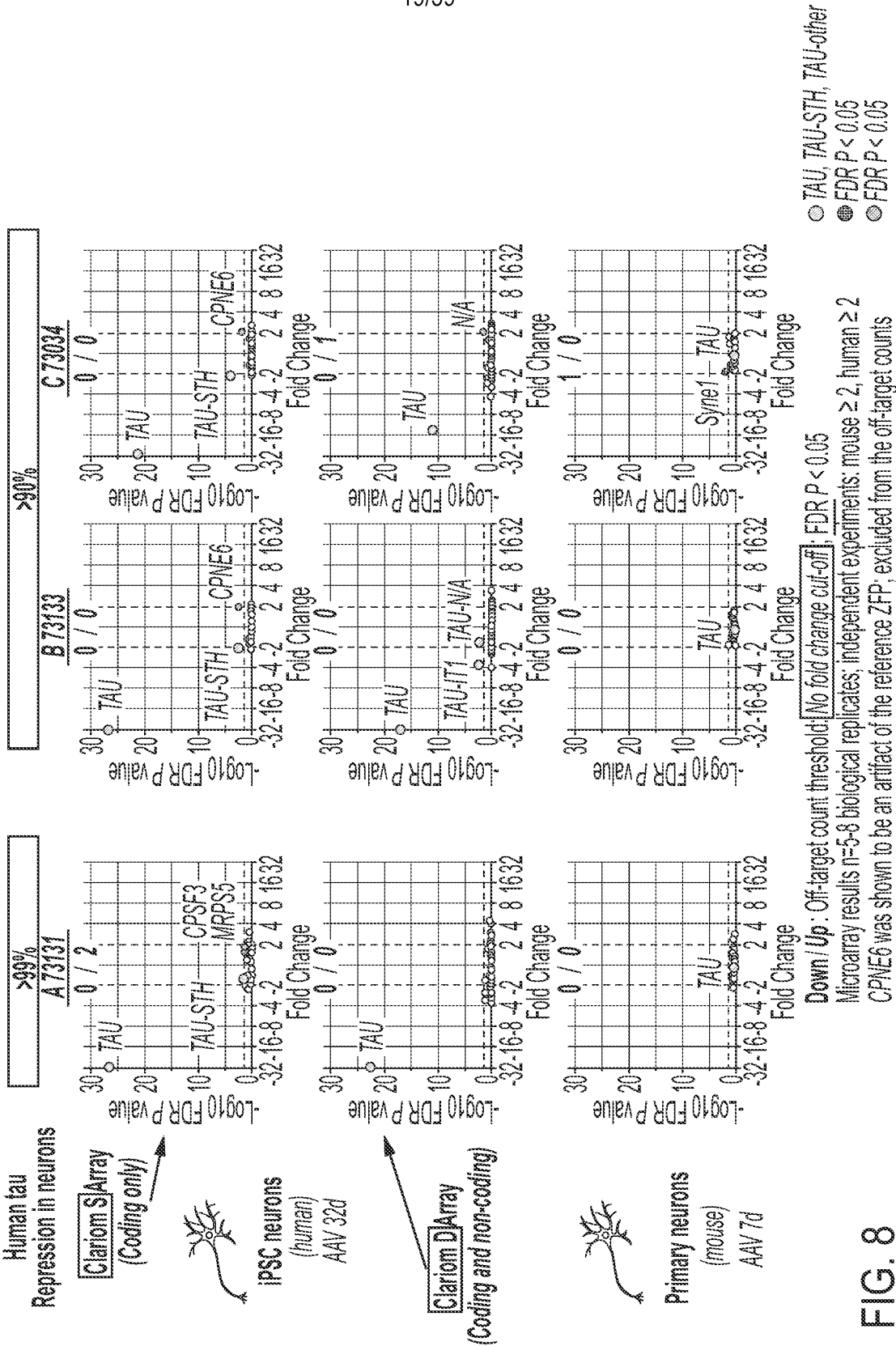
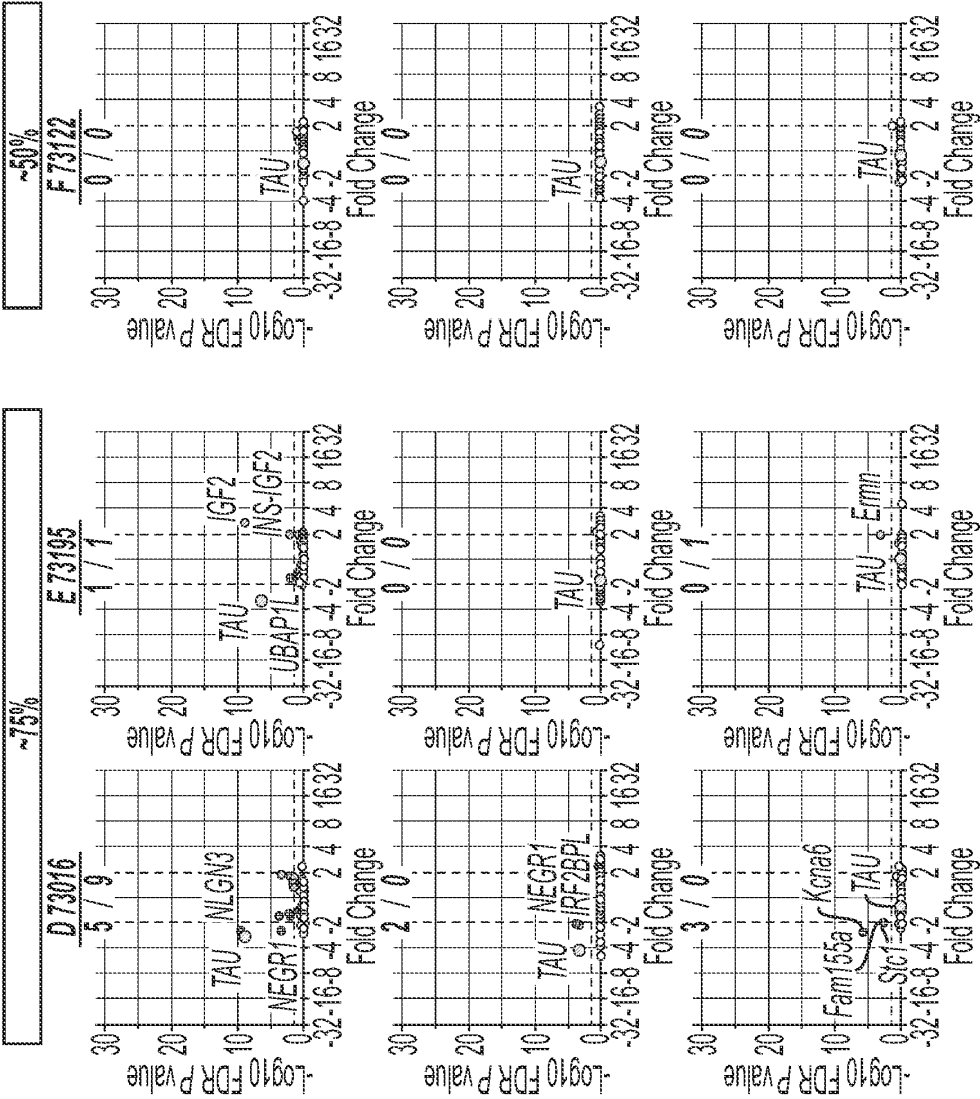


FIG. 8



○ TAU, TAU-STH, TAU-other
● FDR P < 0.05
● FDR P < 0.05

Down / Up : Off-target count threshold / No fold change cut-off, FDR P < 0.05
Microarray results n=5-8 biological replicates; independent experiments: mouse ≥ 2, human ≥ 2
CPNE6 was shown to be an artifact of the reference ZFP, excluded from the off-target counts

FIG. 8
Continued

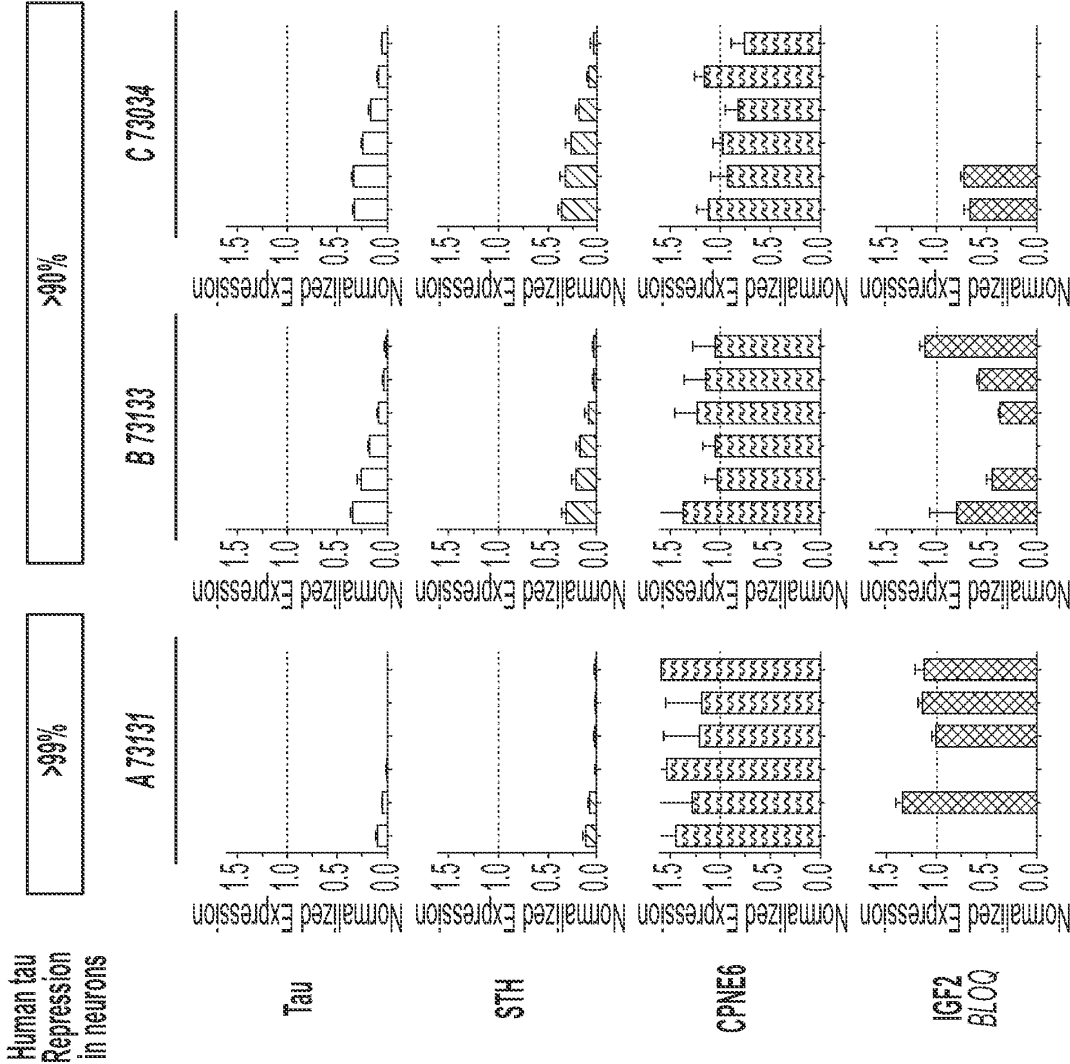


FIG. 9

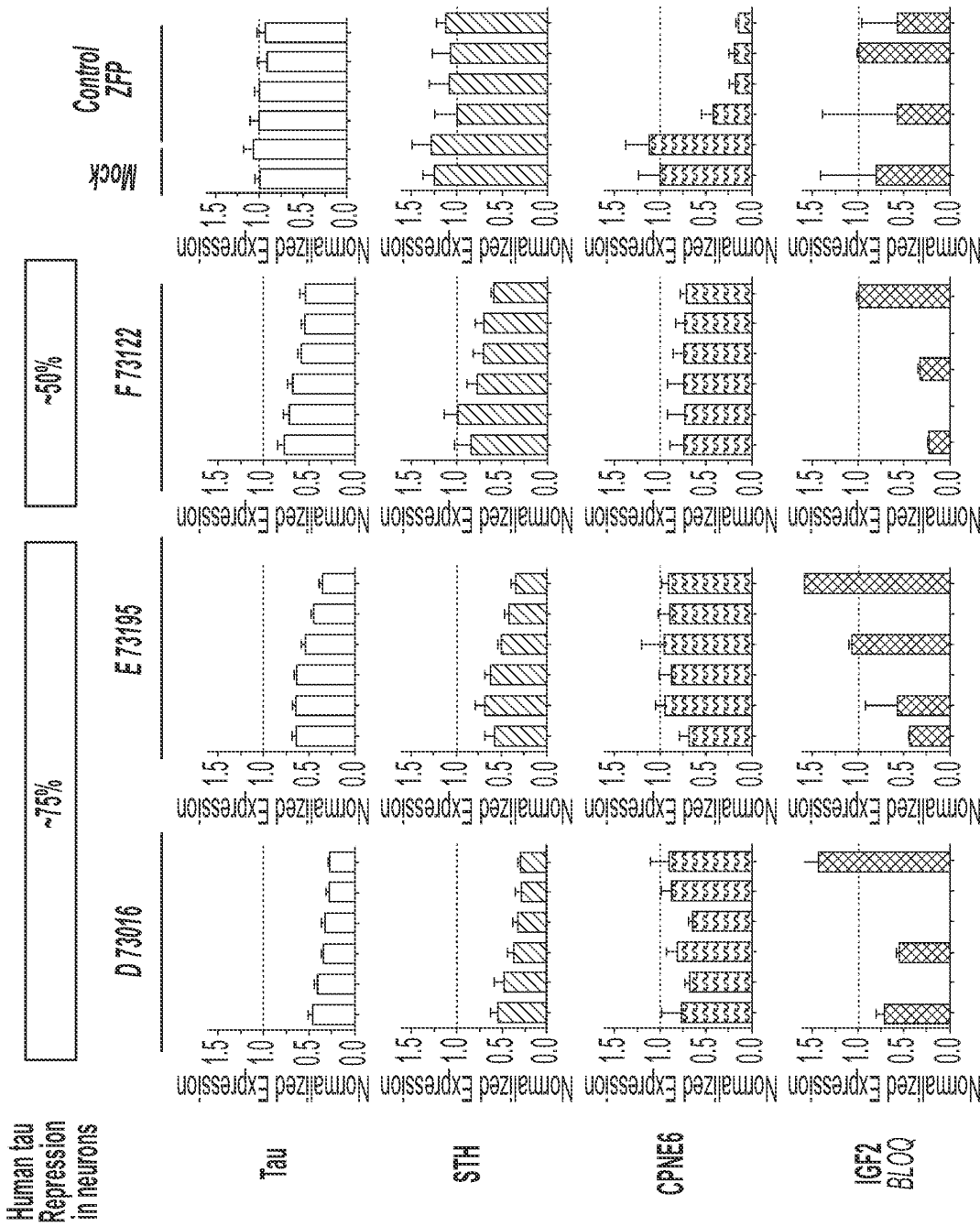


FIG. 9
Continued

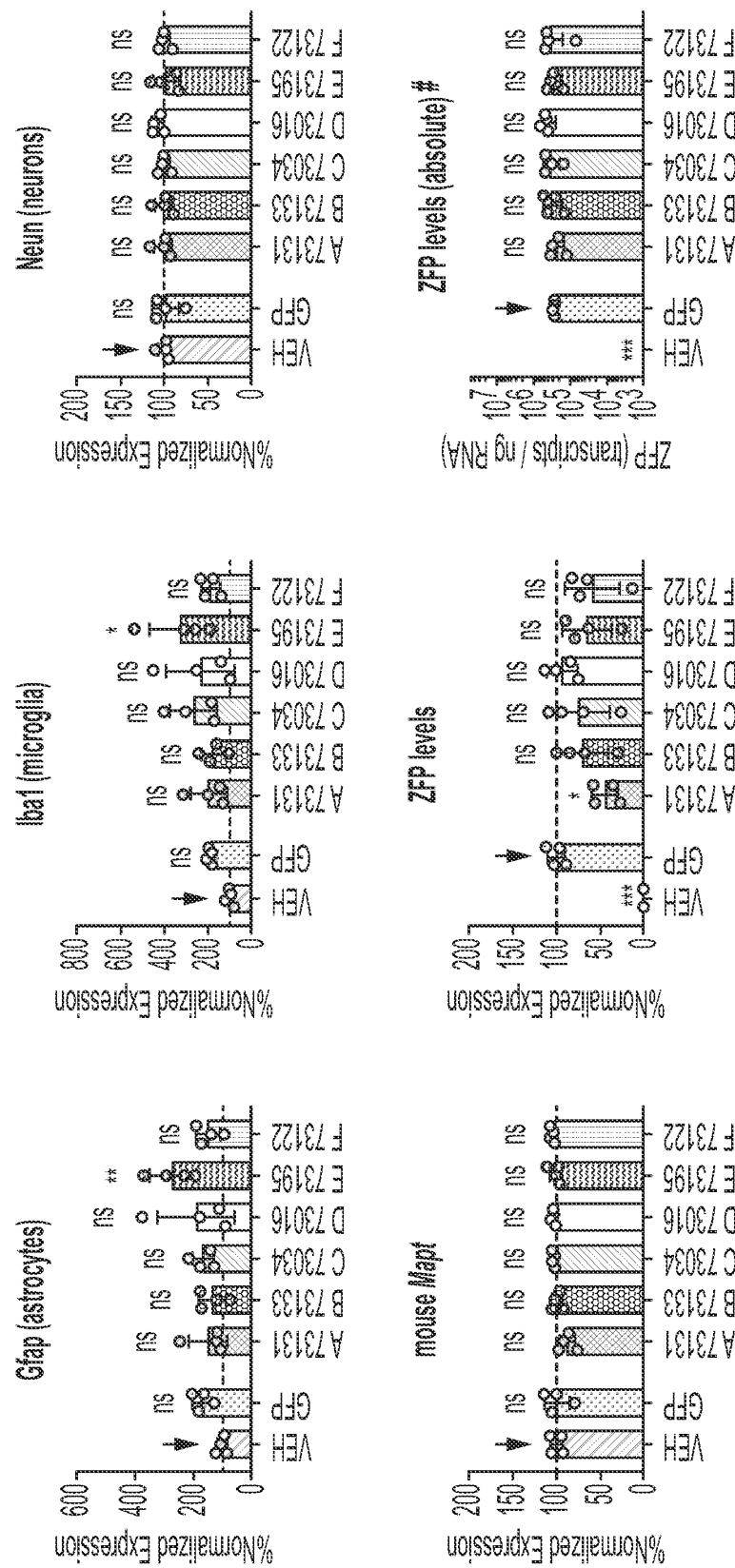


FIG. 10

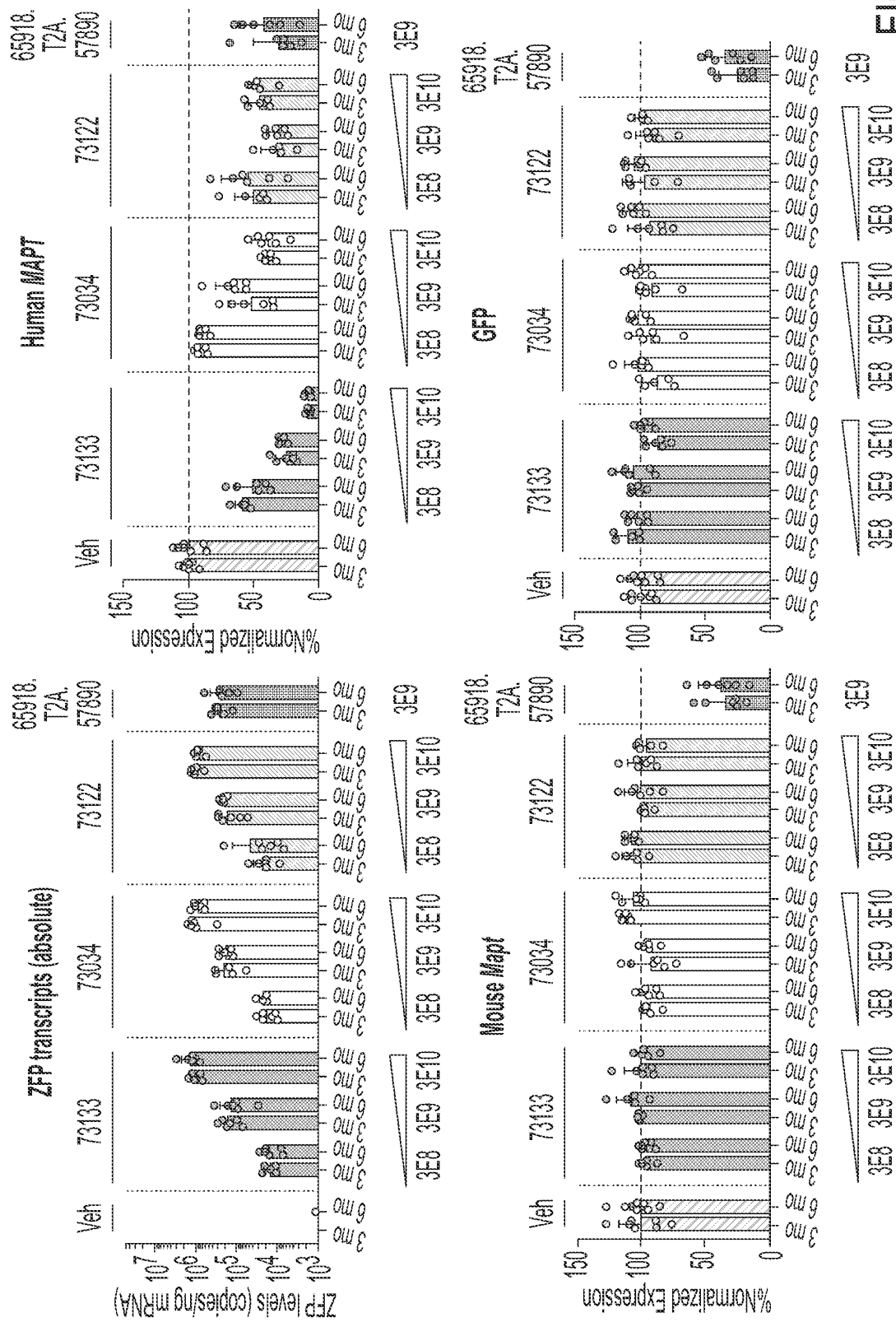


FIG. 11



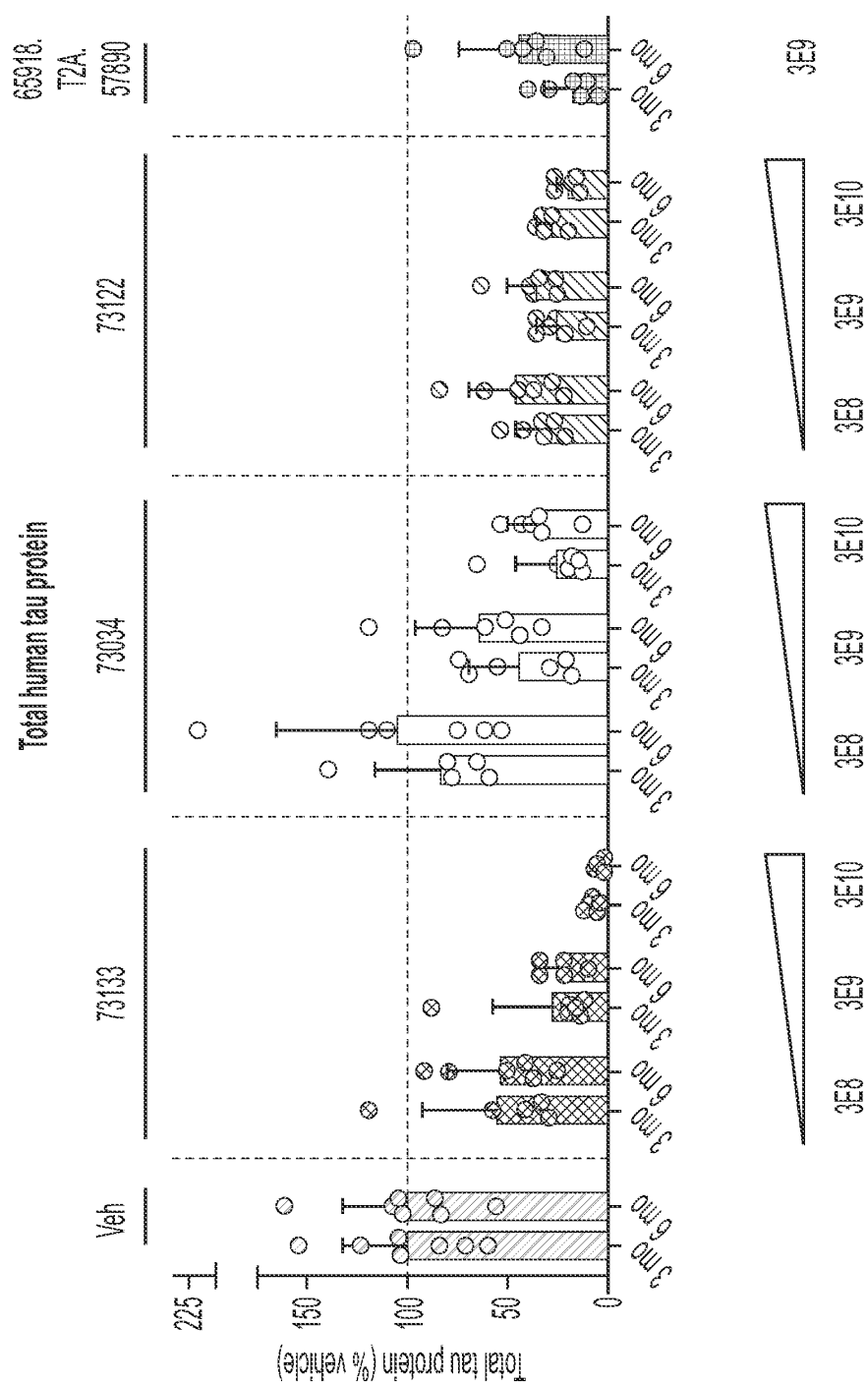


Fig. 12

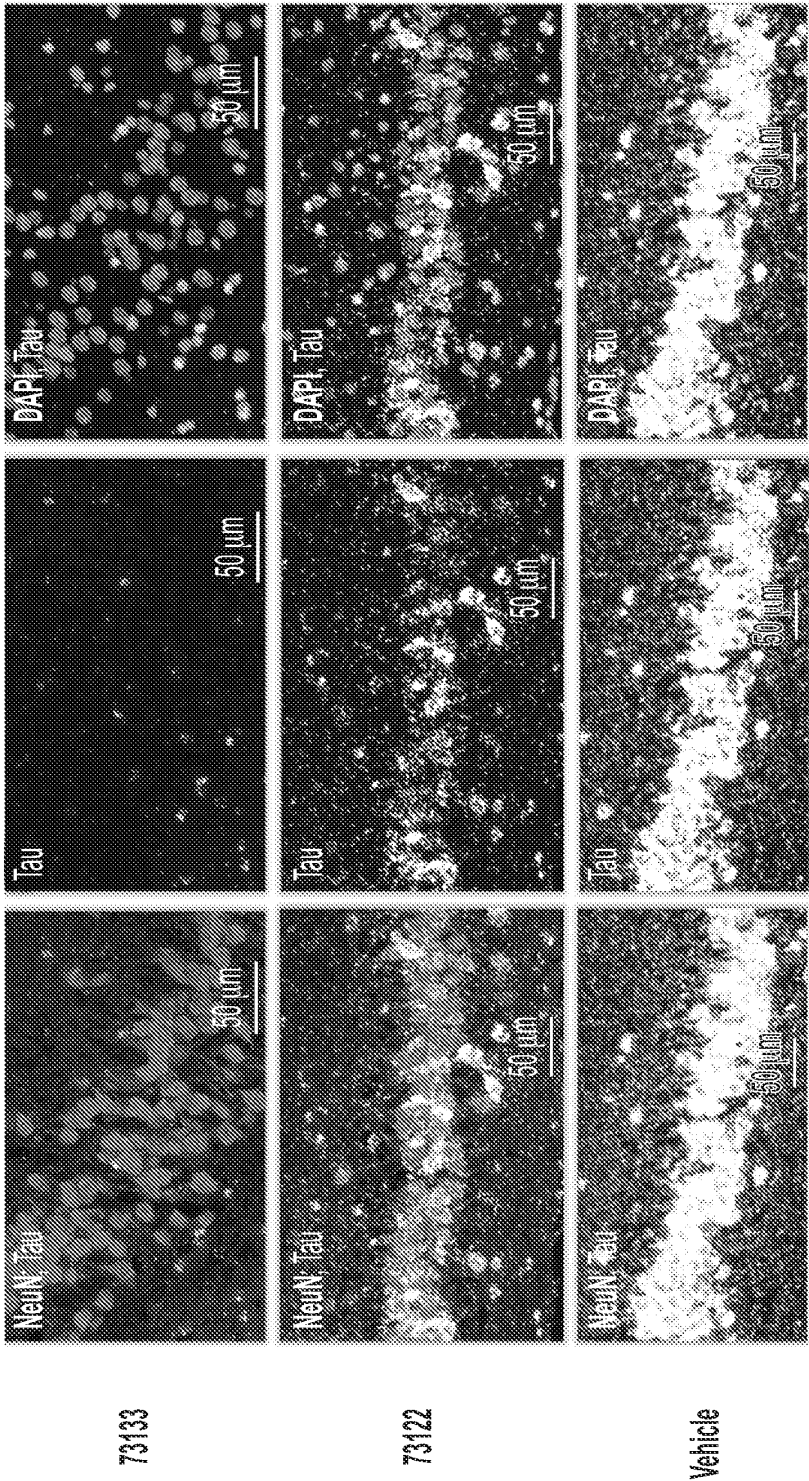


FIG. 13

ZFP ID	Target Sequence (capital letters)	DNA-Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
52288	agGGGCGGGCAGCGag (37)	RSADLTR (89)	0f	QSGDLTR (119)	0c	RSDHLSE (154)	0f	RSAHLRS (104)	C1k				
52389	ccGTTGCGCTGATtGATGCCca (38)	ERGTLAR (90)	0f	TSANLSR (122)	1c	TSGNLTR (115)	0f	HRTSLTD (168)	0c	RSHSLLR (179)	0f	HPSARKR (186)	C1k
52364	cqACAGAAGCGAGga (39)	RSDNLAR (91)	0f	DRSHLAR (123)	0c	QSGNLAR (111)	0f	QSNTRIM (169)	C1k				
57890	tgGTGCTGGAGCTGGTGGGTgg (40)	LRHHLTR (92)	0f	RRFTLSK (124)	0c	RSDVLSE (155)	0f	KHSTRRV (170)	0c	RSDVLSE (155)	0f	RLYTLHK (187)	C1k
71214	gtTCCGTGGCGCAGCGct (41)	RRSDLKR (93)	0a	DQSNLRA (125)	0f	RKSDRIK (156)	0c	RSDSLSR (94)	0f	DRSDRTK (126)	C1k		
71218	gcGCGCAGCGCGTTCGTGgc (42)	RSDLSLR (94)	0f	DRSDRTK (126)	0c	RKQDLRT (157)	0f	RRSDLKR (93)	0c	DQSNLRA (125)	0f	RRSDLKR (93)	C1k
71225	gcGGCGCTGACCGCAGCGCga (43)	RSDDLTR (95)	0f	MSYQLGR (127)	0c	QAHHLRT (96)	0f	DRSNLTR (128)	0c	QSSDLRS (105)	0f	DRSHLAR (123)	C1k
71227	caGGCGCGCGCTGACCGCag (44)	QAHHLRT (96)	0f	DRSNLTR (128)	0c	QSSDLRS (105)	0f	DRSHLAR (123)	0c	YDYGRTY (180)	0f	DRSHLAR (123)	C1k
71249	cgGCCGAGCGGAGGCGCTCgc (45)	DRSYRNT (97)	0f	RRSDLKR (93)	1c	RSDNLSQ (158)	0f	RSNARTN (171)	0c	RSDNLAR (91)	0f	DRSVLHR (188)	C1k
71304	agGCGCGAGCAGCGGGAac (46)	QSGHLRS (98)	0a	RSADLTR (89)	0f	QSGDLTR (119)	0c	QNAHRKT (99)	0f	RRSDLKR (93)	C1k		
71309	gcGGCGCAGGCGCGAGCGgg (47)	RSDDLTR (95)	0f	QAATLSR (129)	0c	QNAHRKT (99)	0f	RRSDLKR (93)	1c	QSGDLTR (119)	0f	TQGYLRK (151)	C1k
71310	ggGCGCGCAGGCGCGAGc (48)	QNAHRKT (99)	0f	RSADRKK (130)	0c	RSDNLSA (159)	0f	RSNDRKK (172)	0a	RSDDLTR (95)	C1k		
71312	cgGGCGCGCAGGCGCGAGCag (49)	MSCCRSA (100)	0f	RSADLSR (131)	0c	DRSHLTR (109)	0f	QSGDLTR (119)	0c	DRSHLSR (112)	0f	DRSHLAR (123)	C1k
71341	gtGACTGCGAGGCGCGcg (50)	RSADLTR (89)	0f	DRSHLAR (123)	0c	RSANLTR (160)	0a	SSGHLPP (102)	0f	DRSNLTR (128)	C1k		
71343	gtGGCGGTGACTGCGAGGGCgc (51)	DSSHRTK (101)	0f	MQNYLSR (132)	0c	SSGHLPP (102)	0f	DRSNLTR (128)	0c	TSGHLRS (103)	0f	DRSHLAR (123)	C1k
71345	ggTGGCGGTGACTGCGAGGGCgc (52)	DSSHRTK (101)	0f	MQNYLSR (132)	0c	SSGHLPP (102)	0f	DRSNLTR (128)	1c	RSDHLSE (154)	0f	RNQHRKN (189)	C1k
71347	tgGGTGGCGGTGACTGCGAGgg (53)	RSDNLAR (91)	0f	FREGLYK (133)	0c	DRSNLSR (161)	0f	LKQHLTR (139)	0c	DRSHLTR (109)	0f	LKQHLTR (139)	C1k
71351	tgGTGGGTGCGGTGACTGCga (54)	SSGHLPP (102)	0f	DRSNLTR (128)	0c	TSGHLRS (103)	0f	DRSHLAR (123)	0c	LRHHLTR (92)	0f	RRFTLSK (124)	C1k

FIG. 14

SUBSTITUTE SHEET (RULE 26)

ZFP ID	Target Sequence (capital letters)	DNA-Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
71352	ctGGTGGGtGGCGGTGACTGCga (55)	SSGHLPP (102)	0f	DRSNLTR (128)	0c	TSGHLNR (103)	0f	DRSHLAR (123)	1c	RSANLSR (104)	0f	TSGHLNR (103)	C1k
71357	cgGAGCTGCTGGGTGGCGGTga (56)	TSGHLNR (103)	0f	DRSHLAR (123)	0c	LRHHLNR (92)	0f	RRFTLSK (124)	0c	DDNLSQ (181)	0f	RSANLTR (160)	C1k
71364	tgGTGCCGAGCTGGTGGGTgg (57)	LRHHLNR (92)	0f	RRFTLSK (124)	0c	RSDVLSL (155)	0f	KHSTRRV (170)	0c	RSDTLSE (182)	0f	HHSALRV (190)	C1k
71366	ttGGTGCCGAGCTGGTGGGTg (58)	RSANLSR (104)	0f	TSGHLNR (103)	0c	QSSDLNR (105)	0f	QSGHLNR (98)	0c	ERGTLAR (90)	0f	TSGSLNR (135)	C1k
71370	ctGCTGTGCTGGCGAGCTgg (59)	QSSDLNR (105)	0f	QSGHLNR (98)	0c	ERGTLAR (90)	0f	TSGSLNR (135)	0c	TSGSLNR (107)	0f	HSSDLNR (137)	C1k
71373	gcGCTGCTGTGGTGCCGAgc (60)	QSGHLNR (106)	0f	CPKCRNK (134)	0c	LRHHLNR (92)	0f	HRSARKR (136)	0c	QSSDLNR (105)	0f	HRSTRNR (173)	C1k
71374	gcGGCGCTGCTGTGGTGCCgg (61)	ERGTLAR (90)	0f	TSGSLNR (135)	0c	TSGSLNR (107)	0f	HSSDLNR (137)	0c	QSSDLNR (105)	0f	DRSHLAR (123)	C1k
71377	gcAGCGCGCTGCTGTGGTgc (62)	LRHHLNR (92)	0f	HRSARKR (136)	0c	QSSDLNR (105)	0f	HRSTRNR (173)	0c	DRSHLTR (109)	0f	NSRNLNR (191)	C1k
71378	ggTGGCAGCGCGCTGCTGTgg (63)	TSGSLNR (107)	0f	HSSDLNR (137)	0c	QSSDLNR (105)	0f	DRSHLAR (123)	1c	RSDNLSL (183)	0f	FHSCLSA (192)	C1k
71385	agAAGCTGgCGCGTGCAGCGgc (64)	RSDLSK (108)	0f	QSAITRK (138)	0c	RSDVLSK (162)	0f	RSDRIK (174)	1c	RQDCLSL (163)	0f	RNDNRKT (175)	C1k
71389	cgGCAGAAGGTGGGcGGTGGCag (65)	DRSHLTR (109)	0f	LKQHLNR (139)	1c	RSANLSR (104)	0f	TSGHLNR (103)	0c	QSGNLAR (111)	0f	QSGDLNR (119)	C1k
71391	ggCGGCAGAAGGTGgCGGTGgc (66)	LRHHLNR (92)	0f	MACCRYA (140)	1c	RQDCLSL (163)	0f	RNDNRKT (175)	0c	RSDNLSQ (158)	0f	RSNARTN (171)	C1k
71393	gtGGCGGCGGCAGAAGTGGGcg (67)	RSANLSR (104)	0f	TSGHLNR (103)	0c	QSGNLAR (111)	0f	QSGDLNR (119)	1c	DRSHLSR (112)	0f	DRSHLAR (123)	C1k
71395	gtGCTGGCGGCGGCAGAAGtg (68)	RSDNLSQ (110)	0f	QNAHRTT (141)	0c	DRSHLSR (112)	0f	DRSHLAR (123)	0c	DRSHLTR (109)	0f	LKQHLNR (139)	C1k
71397	gcTGTGGTGGCGGCGGCAGAgg (69)	QSGNLAR (111)	0f	QSGDLNR (119)	1c	DRSHLSR (112)	0f	DRSHLAR (123)	0c	LRHHLNR (92)	0f	HKQHRDA (142)	C1k
71398	gtGGCTGTGGTGGCGGCGGcag (70)	DRSHLSR (112)	0f	DRSHLAR (123)	0c	DRSHLTR (109)	0f	LKQHLNR (139)	0c	WRSCRSA (164)	0f	DSSHRTR (101)	C1k
71399	ggTGGCTGtGGTGGCGGCGGcag (71)	DRSHLSR (112)	0f	DRSHLAR (123)	0c	DRSHLTR (109)	0f	LKQHLNR (139)	1c	RSDVLSL (155)	0f	RNQHRKT (193)	C1k
71400	aaGGTGGCTGTGGTGGCGGCGg (72)	DRSHLSR (112)	0f	DRSHLAR (123)	0c	LRHHLNR (92)	0f	HKQHRDA (142)	0c	DRSHLTR (109)	0f	LKQHLNR (139)	C1k

FIG. 14 Continued

SUBSTITUTE SHEET (RULE 26)

ZFP ID	Target Sequence (capital letters)	DNA-Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
71401	gaGAAGGTGGCTGTGGTGGcg (73)	DRSHLTR (109)	0f	LKQHLTR (139)	0c	WRSCRSA (164)	0f	DSSHRTR (101)	0c	TSGHLNR (103)	0f	QSGNLAR (111)	C1k
71402	gaGGAGAAGGTGGCTGTGGTgg (74)	LRHHLTR (92)	0f	HKQHRDA (142)	0c	DRSHLTR (109)	0f	LKQHLTR (139)	0c	QSSNLAR (114)	0f	QSGHLNR (98)	C1k
71414	agGACGGGaGAGGACAGCGGAgg (75)	QSGHLAR (106)	0f	SPCCRYH (143)	0c	DRSNLNR (161)	0f	TSANLNR (122)	1c	RSANLNR (104)	0f	DRSNLTR (128)	C1k
71420	gaGGCGAGGACGGGAGGAGGaca (76)	QSGHLAR (106)	0f	QLTHLNS (144)	0c	RSANLNR (104)	0f	DRSNLTR (128)	0c	RSANLNR (116)	0f	DRSHLAR (123)	C1k
71421	ccTCTGTCGACTATCAGgt (77)	RSDNLSE (113)	0f	TSSNRKT (145)	0c	DRSNLNR (161)	0f	DSSARNT (176)	0a	RNSDRTK (184)	C1k		
71424	ctGTCTGACTATCAGgTAAGCGcc (78)	RSADLTR (89)	0f	QSANRKT (146)	1c	RSDNLSE (113)	0f	TSSNRKT (145)	0c	DRSNLNR (161)	0f	DSSARNT (176)	C1k
71437	ggTAAGCGCCGCGGcTCCGAAt (79)	QSSNLAR (114)	0f	DSSDRKK (147)	1c	RSDHLSE (154)	0f	RNRDRIT (177)	0c	RSADLTR (89)	0f	QSANRKT (146)	C1k
71447	cgGACGGCGAGGCAGATtt (80)	TSGNLTR (115)	0f	QQNTLTM (148)	0c	RSDNLTR (165)	0a	DRSHLTR (109)	0f	DRSNLTR (128)	C1k		
71448	agGCGGACGGCGAGGCAGATtt (81)	TSGNLTR (115)	0f	QQNTLTM (148)	0c	RSDNLAR (91)	0f	DRSHLAR (123)	0c	DRSNLNR (161)	0f	DAFTRTR (194)	C1k
71453	gtGCACAGaGGCGGAcGGCGAGgc (82)	RSANLAR (116)	0f	DRSHLAR (123)	1c	DRSHLTR (109)	0f	DRSHLAR (123)	1c	RSDALSE (185)	0f	QMATRTK (150)	C1k
71467	ggGGCGGCGCGCAGGGGTGca (83)	RSDSLAR (117)	0f	RSDHLNR (149)	0c	QSGDLTR (119)	0f	TQGYLRK (151)	0c	DRSHLAR (112)	0f	DRSHLAR (123)	C1k
71468	gcGAGGGGcGGCGGCGCAGGGgt (84)	RSDHLNR (118)	0f	QMATRTK (150)	0c	DRSHLAR (112)	0f	DRSHLAR (123)	1c	RSANLNR (104)	0f	TSANLNR (122)	C1k
71470	agGGCGAGgGGCGGCGGCGCagg (85)	QSGDLTR (119)	0f	TQGYLRK (151)	0c	DRSHLAR (112)	0f	DRSHLAR (123)	1c	RSDNLAR (91)	0f	DRSHLAR (123)	C1k
71472	ggGAGGGCGAGGGGcGGCGGgc (86)	DRSHLAR (112)	0f	DRSHLAR (123)	1c	RSANLNR (104)	0f	TSANLNR (122)	0c	DSSHRTR (101)	0f	MONYLSR (132)	C1k
71485	gcGGCGGCGATCGGTGCGGcc (87)	RSDHLNR (120)	0f	RSDDRKK (152)	0c	RSDHLST (166)	0f	TNSNRIT (178)	0c	RSANLNR (104)	0f	DRSDLSR (195)	C1k
71503	gcCAGGGCGGCTGGAAAGGga (88)	RSDNLNR (121)	0f	TSSSRIN (153)	0c	RSDALSV (167)	0f	DSSHRTR (101)	0c	DSSHRTR (101)	0f	AKWNLDAR (196)	C1k

FIG. 14 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
52288 (197)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSADLTR HIRHTGEEKPFACDICGRKFA QSCDLTR HHTKIHTGSQKPFQCRICMRNFS RS DHLSEHIR THTGEEKPFACDICGRKFA RS AHL SR HHTKIHLROKDAARGSGGDAKSLTAWSTRTLVTEKDVFDFTREENKLLDTAQQIVYRNVMLENYKNLVSLGYQ LTKPDVILRLEKGEEPWLVEREIQETHPDSETAFEIKSSVRS
52389 (198)	MAPKKRKVGVPAAEAERPFQCRICMRNFS ERGLAR HIRHTGEEKPFACDICGRKFA TSANLSR HHTKIHTHPRAPIPKPEQCRICMRNFS TS GNLT R HIRHTGEEKPFACDICGRKFA HT SLTDHTKIHTGSQKPFQCRICMRNFS RS SHSLLRHIRTHTGEEKPFACDICGRKFA HP SARKRHHTKIHLROKDA ARG SGGDAKSLTAWSTRTLVTEKDVFDFTREENKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIQETHPDSETAFE IKSSVRS
52364 (199)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RS DNLARHIRHTGEEKPFACDICGRKFAD RS HLARHHTKIHTGSQKPFQCRICMRNFS Q SGNLARHIR THTGEEKPFACDICGRKFA Q SNTRIMHHTKIHLROKDAARGSGGDAKSLTAWSTRTLVTEKDVFDFTREENKLLDTAQQIVYRNVMLENYKNLVSLGYQ LTKPDVILRLEKGEEPWLVEREIQETHPDSETAFEIKSSVRS
57890 (200)	MAPKKRKVGVPAAEAERPFQCRICMRNFS LR HHLTRHIRHTGEEKPFACDICGRKFA RR FTLSKHHTKIHTGSQKPFQCRICMRNFS RS DDVLSEHIR THTGEEKPFACDICGRKFA KH STRRVHHTKIHTGSQKPFQCRICMRNFS RS DLSEHIRTHTGEEKPFACDICGRKFARLYTLHKHHTKIHLROKDAARGSGGDAKSLTAWSTRTLVTEKDVFDFTREENKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIQETHPDSETAFEIKSS VRS
71214 (201)	MAPKKRKVGVPAAEAERPFQCRICMRKFA RR SDLKRHHTKIHTGEEKPFQCRICMRNFS DQ SNLRAHIRHTGEEKPFACDICGRKFAR K SDRIKHHTKI HTGSQKPFQCRICMRNFS RS DSL SR HIRTHTGEEKPFACDICGKFA DR SDRTKHHTKIHLROKDAARGSGGDAKSLTAWSTRTLVTEKDVFDFTREEN KLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIQETHPDSETAFEIKSSVRS

FIG. 15

7128 (202)	MAPKKRKVGVPAAAEPRFQCRICMRNFS RS DSL SR HIRTHTEGKPFACDICGKKFA DRSDAT KHTKIHTGSQKPFQCRICMRNFS RKQ TR THIR THTGEKPFACDICGKKFA RR SL DKR HHTKIHTGSQKPFQCRICMRNFS DQ SNL RA HIRTHTEGKPFACDICGKKFA RR SD LKR HHTKIHLRQKDAAGS GGDAKSLTAWSR ~~TL~~ VTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
7125 (203)	MAPKKRKVGVPAAAEPRFQCRICMRNFS RS DDL TR HIRTHTEGKPFACDICGKKFA MSYQ LGR HHTKIHTGSQKPFQCRICMRNFS QA H L R THIR THTGEKPFACDICGKKFA DR SN L TR HHTKIHTGSQKPFQCRICMRNFS QS SD L SR HIRTHTEGKPFACDICGKKFA DR SH L AR HHTKIHLRQKDAAGS GGDAKSLTAWSR ~~TL~~ VTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
7127 (204)	MAPKKRKVGVPAAAEPRFQCRICMRNFS QA H L R THIRTHTEGKPFACDICGKKFA DR SN L TR HHTKIHTGSQKPFQCRICMRNFS QS SD L SR HIR THTGEKPFACDICGKKFA DR SH L AR HHTKIHTGSQKPFQCRICMRNFS YD Y G R Y T HIRTHTEGKPFACDICGKKFA DR SH L AR HHTKIHLRQKDAAGS GGDAKSLTAWSR ~~TL~~ VTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
71249 (205)	MAPKKRKKVGVPAAMAERPFQCRICMRNFS <u>DRSYRNT</u> HIRHTGKPFACDICGRKFARRSDLKRRHTKIHHTHPAPIPKPFQCRICMRNFSRSDNLS QHIRTHTGKPFACDICGRKFAR <u>SNARTN</u> HHTKIHTGSQKPFQCRICMRNFS <u>RSDN</u> LARHIRTHTGKPFACDICGRKFADRSVLHRHTKIHILRQKDA ARGSGGDAKSLTAWSTRITVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71304 (206)	MAPKKRKKVGVPAAMAERPFQCRICMRKFA <u>QSGHLS</u> RHTKIHTGKPFQCRICMRNFSRSDLTRHIRTHTGKPFACDICGRKF <u>QSGDL</u> TRHTKI HTGSQKPFQCRICMRNFS <u>QNAHRKT</u> HIRTHTGKPFACDICGRKFARRSDLKRRHTKIHILRQKDAARGSGGDAKSLTAWSTRITVTFKDVDFVTREEW KLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSSVRS
71309 (207)	MAPKKRKKVGVPAAMAERPFQCRICMRNFS <u>RSDDL</u> TRHIRTHTGKPFACDICGRKFAQAATLSRHTKIHHTGSQKPFQCRICMRNFSQNAHRKTHIR THTGKPFACDICGRKFAR <u>RSDL</u> KRRHTKIHTHPAPIPKPFQCRICMRNFS <u>QSGDL</u> TRHIRTHTGKPFACDICGRKFATQGYLRKHTKIHILRQKDA ARGSGGDAKSLTAWSTRITVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71310 (208)	MAPKKRKKVGVPAAMAERPFQCRICMRNFSQNAHRKTHIRTHTGKPFACDICGRKFARSADRRKHHTKIHTGSQKPFQCRICMRNFSRSDNLSAHIR THTGKPFACDICGRKFAR <u>SNDRK</u> KHTKIHTGKPFQCRICMRKFARSDDLTRHTKIHILRQKDAARGSGGDAKSLTAWSTRITVTFKDVDFVTREEW KLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSSVRS
71312 (209)	MAPKKRKKVGVPAAMAERPFQCRICMRNFS <u>MSCCR</u> SAHIRTHTGKPFACDICGRKFARSADLSRHTKIHHTGSQKPFQCRICMRNFSRSHLTRHIR THTGKPFACDICGRKFAP <u>QSGDL</u> TRHTKIHTGSQKPFQCRICMRNFSRSHLSRHIRTHTGKPFACDICGRKFADRSHLARHTKIHILRQKDAARGS GGDAKSLTAWSTRITVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

71341 (210)	MAPKKRKVGVPAA ~~MAER~~ PFQCRICMRNFS RSADLTR HIRHTGTGKPFACDICGRKFAD DRSHLAR HHTKIHTGSQPFQCRICMRKFAR SANLTR HHTK IHTGKPFQCRICMRNFS SSGHLPP HIRHTGTGKPFACDICGRKFAD DRSNLTR HHTKIHILRQKDAARGSGGDAKSLTAWSR ~~TLVT~~ FKDVFVDFTREEW KLDDTAQQIVYRNVMLN ~~YKNLV~~ SLGYQ ~~LT~~ KPDVILRLEKGEEPW ~~VERE~~ IHQETHPDSETAFEIKSSVRS
71343 (211)	MAPKKRKVGVPAA ~~MAER~~ PFQCRICMRNFS DSSHRT HIRHTGTGKPFACDICGRKFAMQNYLSRHHTKIHTGSQPFQCRICMRNFS SSGHLPP HIR THTGKPFACDICGRKFAD DRSNLTR HHTKIHTGSQPFQCRICMRNFS TSCHLSR HIRHTGTGKPFACDICGRKFAD DRSHLAR HHTKIHILRQKDAARGSGG DAKSLTAWSR ~~TLVT~~ FKDVFVDFTREEWKLDDTAQQIVYRNVMLN ~~YKNLV~~ SLGYQ ~~LT~~ KPDVILRLEKGEEPW ~~VERE~~ IHQETHPDSETAFEIKSS VRS
71345 (212)	MAPKKRKVGVPAA ~~MAER~~ PFQCRICMRNFS DSSHRT HIRHTGTGKPFACDICGRKFAMQNYLSRHHTKIHTGSQPFQCRICMRNFS SSGHLPP HIR THTGKPFACDICGRKFAD DRSNLTR HHTKIH ~~TH~~ PRAP ~~IP~~ KPFQCRICMRNFS RSDDLSE HIRHTGTGKPFACDICGRKFAR QNQHRKN HHTKIHILRQKDA ARGSGGDAKSLTAWSR ~~TLVT~~ FKDVFVDFTREEWKLDDTAQQIVYRNVMLN ~~YKNLV~~ SLGYQ ~~LT~~ KPDVILRLEKGEEPW ~~VERE~~ IHQETHPDSETAFE IKSSVRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
71347 (213)	MAPKKRKGVPAAEAERPFCRICMRNFS <u>RS</u> <u>DNLAR</u> HIRTHTGEKPFACDICGRKFAP <u>FREGLYK</u> HHTKIHTGSQKPFQCRICMRNFS <u>DRS</u> <u>NLSR</u> <u>SR</u> HIR THTGEKPFACDICGRKFAP <u>LKQHLTR</u> HHTKIHTGSQKPFQCRICMRNFS <u>DRS</u> <u>SLTR</u> HIRTHTGEKPFACDICGRKFAP <u>LKQHLTR</u> HHTKIHLRQKDAARGS <u>GG</u> <u>DAK</u> <u>SLT</u> <u>AW</u> <u>SRT</u> <u>LV</u> <u>TF</u> <u>KD</u> <u>V</u> <u>F</u> <u>VD</u> <u>FT</u> <u>RE</u> <u>EW</u> <u>K</u> <u>LLD</u> <u>TAQ</u> <u>Q</u> <u>IV</u> <u>YR</u> <u>N</u> <u>V</u> <u>M</u> <u>LE</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>LG</u> <u>Y</u> <u>Q</u> <u>LT</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> VRS
71351 (214)	MAPKKRKGVPAAEAERPFCRICMRNFS <u>SS</u> <u>CHLPP</u> HIRTHTGEKPFACDICGRKFAD <u>RSNLTR</u> HHTKIHTGSQKPFQCRICMRNFS <u>TS</u> <u>GHL</u> <u>SR</u> <u>HR</u> HIR THTGEKPFACDICGRKFAD <u>DRSHLAR</u> HHTKIHTGSQKPFQCRICMRNFS <u>LRHHLTR</u> HIRTHTGEKPFACDICGRKFAP <u>REFTLSK</u> HHTKIHLRQKDAARGS <u>GG</u> <u>DAK</u> <u>SLT</u> <u>AW</u> <u>SRT</u> <u>LV</u> <u>TF</u> <u>KD</u> <u>V</u> <u>F</u> <u>VD</u> <u>FT</u> <u>RE</u> <u>EW</u> <u>K</u> <u>LLD</u> <u>TAQ</u> <u>Q</u> <u>IV</u> <u>YR</u> <u>N</u> <u>V</u> <u>M</u> <u>LE</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>LG</u> <u>Y</u> <u>Q</u> <u>LT</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> VRS
71352 (215)	MAPKKRKGVPAAEAERPFCRICMRNFS <u>SS</u> <u>CHLPP</u> HIRTHTGEKPFACDICGRKFAD <u>RSNLTR</u> HHTKIHTGSQKPFQCRICMRNFS <u>TS</u> <u>GHL</u> <u>SR</u> <u>HR</u> HIR THTGEKPFACDICGRKFAD <u>DRSHLAR</u> HHTKIHTHPRAPIPKPFQCRICMRNFS <u>SAHLSR</u> HIRTHTGEKPFACDICGRKFAP <u>TS</u> <u>GHL</u> <u>SR</u> <u>H</u> <u>HT</u> <u>KI</u> <u>HL</u> <u>RQ</u> <u>KA</u> <u>ARG</u> <u>SG</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>VD</u> <u>FT</u> <u>RE</u> <u>EW</u> <u>K</u> <u>LLD</u> <u>TAQ</u> <u>Q</u> <u>IV</u> <u>YR</u> <u>N</u> <u>V</u> <u>M</u> <u>LE</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>LG</u> <u>Y</u> <u>Q</u> <u>LT</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> IKSSVRS
71357 (216)	MAPKKRKGVPAAEAERPFCRICMRNFS <u>TS</u> <u>GHL</u> <u>SR</u> <u>H</u> <u>IR</u> <u>TH</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>LR</u> <u>H</u> <u>HL</u> <u>TR</u> <u>H</u> <u>IR</u> THTGEKPFACDICGRKFAP <u>REFTLSK</u> HHTKIHTGSQKPFQCRICMRNFS <u>DD</u> <u>NNLSQ</u> IRTHTGEKPFACDICGRKFAP <u>SANL</u> <u>TR</u> <u>H</u> <u>HT</u> <u>KI</u> <u>HL</u> <u>RQ</u> <u>KA</u> <u>ARGS</u> <u>GG</u> <u>DAK</u> <u>SLT</u> <u>AW</u> <u>SRT</u> <u>LV</u> <u>TF</u> <u>KD</u> <u>V</u> <u>F</u> <u>VD</u> <u>FT</u> <u>RE</u> <u>EW</u> <u>K</u> <u>LLD</u> <u>TAQ</u> <u>Q</u> <u>IV</u> <u>YR</u> <u>N</u> <u>V</u> <u>M</u> <u>LE</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>LG</u> <u>Y</u> <u>Q</u> <u>LT</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> VRS
71364 (217)	MAPKKRKGVPAAEAERPFCRICMRNFS <u>LR</u> <u>HHL</u> <u>TR</u> <u>H</u> <u>IR</u> <u>TH</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>R</u> <u>R</u> <u>E</u> <u>T</u> <u>LSK</u> HHTKIHTGSQKPFQCRICMRNFS <u>RS</u> <u>DL</u> <u>SE</u> <u>HR</u> THTGEKPFACDICGRKFAP <u>KHSTR</u> <u>RV</u> <u>H</u> <u>HT</u> <u>KI</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>RS</u> <u>DT</u> <u>SE</u> IRTHTGEKPFACDICGRKFAP <u>HSAL</u> <u>RV</u> <u>H</u> <u>HT</u> <u>KI</u> <u>HL</u> <u>RQ</u> <u>KA</u> <u>ARGS</u> <u>GG</u> <u>DAK</u> <u>SLT</u> <u>AW</u> <u>SRT</u> <u>LV</u> <u>TF</u> <u>KD</u> <u>V</u> <u>F</u> <u>VD</u> <u>FT</u> <u>RE</u> <u>EW</u> <u>K</u> <u>LLD</u> <u>TAQ</u> <u>Q</u> <u>IV</u> <u>YR</u> <u>N</u> <u>V</u> <u>M</u> <u>LE</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>LG</u> <u>Y</u> <u>Q</u> <u>LT</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> VRS

FIG. 15 Continued

71366 (218)	MAPKKRKVGVPAAEAERPFQCRICMRNFSR SAHLSR HIRTHHTGKPFACDICGRKF ATSGHLSR HHTKIHTGSQKPFQCRICMRNFS QSSDLSR HIR THTGKPFACDICGRKF AQSGHLSR HHTKIHTGSQKPFQCRICMRNFS ERGT LARHIRTHTGKPFACDICGRKF ATSGSL TRHTKIHLROKDAAGS <u>GGDAKSLT</u> AWSRTLVTFFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71370 (219)	MAPKKRKVGVPAAEAERPFQCRICMRNFS QSSDLSR HIRTHHTGKPFACDICGRKF AQSGHLSR HHTKIHTGSQKPFQCRICMRNFS ERGT LARHIR THTGKPFACDICGRKF ATSGSL TRHTKIHTGSQKPFQCRICMRNFS TS GSLSRHIRTHTGKPFACDICGRKF AHSSD LNRHTKIHLROKDAAGS <u>GGDAKSLT</u> AWSRTLVTFFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, Z ⁺ linker, & interdomain linker)
71373 (220)	MAPKKRKVGVPAAEAERPFOCRICMRNFSQSGHLARHIRTHTGKPPFACDICGRKFA CPKCRNK HHTKIHTGSQKPFQCRICMRNFS LRHHLTR HIR THTGKPPFACDICGRKFA HRSARKR HHTKIHTGSQKPFQCRICMRNFS QSSDLSR HIRTHTGKPPFACDICGRKFA HRSTRNR HHTKIHLRQKDAAGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREWKLLD TAQQIVYRNV MLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71374 (221)	MAPKKRKVGVPAAEAERPFOCRICMRNFS ERGTLAR HIRTHTGKPPFACDICGRKFA TSGSLTR HHTKIHTGSQKPFQCRICMRNFS TSGSLSR HIR THTGKPPFACDICGRKFA HSSDLNR HHTKIHTGSQKPFQCRICMRNFS QSSDLSR HIRTHTGKPPFACDICGRKFA DRSHLAR HHTKIHLRQKDAAGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREWKLLD TAQQIVYRNV MLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71377 (222)	MAPKKRKVGVPAAEAERPFOCRICMRNFS LRHHLTR HIRTHTGKPPFACDICGRKFA HRSAPKR HHTKIHTGSQKPFQCRICMRNFS QSSDLSR HIR THTGKPPFACDICGRKFA HRSTRNR HHTKIHTGSQKPFQCRICMRNFS DRSHLTR HIRTHTGKPPFACDICGRKFA NSRNLNR HHTKIHLRQKDAAGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREWKLLD TAQQIVYRNV MLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71378 (223)	MAPKKRKVGVPAAEAERPFOCRICMRNFS TSGLSR HIRTHTGKPPFACDICGRKFA HSSDLNR HHTKIHTGSQKPFQCRICMRNFS QSSDLSR HIR THTGKPPFACDICGRKFA DRSHLAR HHTKIHTHPRAPIPKPFQCRICMRNFS RSDDLST HIRTHTGKPPFACDICGRKFA FHSCLSA HHTKIHLRQKDA <u>ARGSGGDAKSLTAW</u> SRTLVTFFKDVFDFTREWKLLD TAQQIVYRNV MLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71385 (224)	MAPKKRKVGVPAAEAERPFOCRICMRNFS RSDDL SKHIRTHTGKPPFACDICGRKFA QSATRTK HHTKIHTGSQKPFQCRICMRNFS RSDDL SKHIR THTGKPPFACDICGRKFA RSDDR IKHHTKIHTHPRAPIPKPFQCRICMRNFS RSQDCLSL HIRTHTGKPPFACDICGRKFA RNDNRKT HHTKIHLRQKDA <u>ARGSGGDAKSLTAW</u> SRTLVTFFKDVFDFTREWKLLD TAQQIVYRNV MLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS

FIG. 15 Continued

71389 (225)	MAPKKRKVGVPAAEAERPFQCRICMRNFS DRSHLTR HIRHTGKPFACDICGRKFAL KQHLTR HHTKIHTHPRAPIPKPFQCRICMRNFS SAHLS R HIRHTGKPFACDICGRKFA TSGHLSR HHTKIHTGSQKPFQCRICMRNFS QSGNLAR HIRHTGKPFACDICGRKF AQSGDLTR HHTKIHLRQKDA <u>ARGSGGDAKSLTAWSR</u> TLVTFKDVVDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFE IKSSVRS
71391 (226)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSDVLSK HIRHTGKPFACDICGRKFAR SDDRIK HHTKIHTHPRAPIPKPFQCRICMRNFS RSDVLS E HIRHTGKPFACDICGRKFA KRWNRQ HHTKIHTGSQKPFQCRICMRNFS RSDNLSQ HIRHTGKPFACDICGRKF ARSNARTN HHTKIHLRQKDA <u>ARGSGGDAKSLTAWSR</u> TLVTFKDVVDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFE IKSSVRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
71393 (227)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSAHLSR HIRTHTGEKPFACDICGRKFA TSGLSR HHTKIHTGSQKPFQCRICMRNFS QSGNLAR HIR THTGEKPFACDICGRKFA QSGDLTR HHTKIHTHPAPIPKPFQCRICMRNFS DRSHLSR HIRTHTGEKPFACDICGRKFA DRSHLAR HHTKIHLRQKDA <u>ARGSGDAKSLTAW</u> SRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71395 (228)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSDHLSQ HIRTHTGEKPFACDICGRKFA QNAHRIT HHTKIHTGSQKPFQCRICMRNFS DRSHLSR HIR THTGEKPFACDICGRKFA DRSHLAR HHTKIHTGSQKPFQCRICMRNFS DRSHLTR HIRTHTGEKPFACDICGRKFA LKQHLTR HHTKIHLRQKDAARGS <u>GGDAKSLTAW</u> SRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71397 (229)	MAPKKRKVGVPAAEAERPFQCRICMRNFS QSGNLAR HIRTHTGEKPFACDICGRKFA QSGDLTR HHTKIHTHPAPIPKPFQCRICMRNFS DRSHLS R HIRTHTGEKPFACDICGRKFA DRSHLAR HHTKIHTGSQKPFQCRICMRNFS LRHHLTR HIRTHTGEKPFACDICGRKFA HKQHRDA HHTKIHLRQKDA <u>ARGSGDAKSLTAW</u> SRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71398 (230)	MAPKKRKVGVPAAEAERPFQCRICMRNFS DRSHLSR HIRTHTGEKPFACDICGRKFA DRSHLAR HHTKIHTGSQKPFQCRICMRNFS DRSHLTR HIR THTGEKPFACDICGRKFA LKQHLTR HHTKIHTGSQKPFQCRICMRNFS WRSCRSA HIRTHTGEKPFACDICGRKFA DSSHRT HHTKIHLRQKDAARGS <u>GGDAKSLTAW</u> SRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71399 (231)	MAPKKRKVGVPAAEAERPFQCRICMRNFS DRSHLSR HIRTHTGEKPFACDICGRKFA DRSHLAR HHTKIHTGSQKPFQCRICMRNFS DRSHLTR HIR THTGEKPFACDICGRKFA LKQHLTR HHTKIHTHPAPIPKPFQCRICMRNFS RSDDLSE HIRTHTGEKPFACDICGRKFA RNQHRKT HHTKIHLRQKDA <u>ARGSGDAKSLTAW</u> SRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS

FIG. 15 Continued

71400 (232)	MAPKKRKVGVPAAERPFQCRICMRNFS DRSHLSR HIRTHTEKPFACDICGRKFAD DRSHLAR HTKIHTGSQKPFQCRICMRNFS LRHHLTR HIR THTGEKPFACDICGRKFAD HKQHRDA HTKIHTGSQKPFQCRICMRNFS DRSHLTR HIRTHTEKPFACDICGRKFAD ALKQHLTR HTKIHLROKDAARGS GGDAKSLTAWSRITLVTFKDVFDFTREWKLLDTAQQIVVRNVMLNENYKNLVSLGYQLTKPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSS VRS
71401 (233)	MAPKKRKVGVPAAERPFQCRICMRNFS DRSHLTR HIRTHTEKPFACDICGRKFAD ALKQHLTR HTKIHTGSQKPFQCRICMRNFS WRSRCSA HIR THTGEKPFACDICGRKFAD DSSHRTTR HTKIHTGSQKPFQCRICMRNFS TSGHL SRHIRTHTEKPFACDICGRKFAD QSGNLAR HTKIHLROKDAARGS GGDAKSLTAWSRITLVTFKDVFDFTREWKLLDTAQQIVVRNVMLNENYKNLVSLGYQLTKPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
71402 (234)	MAPKKRKVGVPAAEAERPFQCRICMRNFS LRHHLTR HIRTHTGEKPFACDICGRKFA HQQRDA HTKIHTGSQKPFQCRICMRNFS DRSHLTR HIR THTGEKPFACDICGRKFA LKQHLTR HTKIHTGSQKPFQCRICMRNFS QSSNLAR HIRTHTGEKPFACDICGRKFA QSHLSR HTKIHLRQKDAARGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71414 (235)	MAPKKRKVGVPAAEAERPFQCRICMRNFS QSCHLAR HIRTHTGEKPFACDICGRKFA SPCCRYH HTKIHTGSQKPFQCRICMRNFS DRSNLSR HIR THTGEKPFACDICGRKFA TSANLSR HTKIHTHPRAPIPKPFQCRICMRNFS RSAHLSR HIRTHTGEKPFACDICGRKFA DRSNLTR HTKIHLRQKDA <u>ARGSGDAKSLTAW</u> SRTLVTFFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS
71420 (236)	MAPKKRKVGVPAAEAERPFQCRICMRNFS QSCHLAR HIRTHTGEKPFACDICGRKFA QLTHLNS HTKIHTGSQKPFQCRICMRNFS RSAHLSR HIR THTGEKPFACDICGRKFA DRSNLTR HTKIHTGSQKPFQCRICMRNFS RSANLAR HIRTHTGEKPFACDICGRKFA DRSHLAR HTKIHLRQKDAARGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71421 (237)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSNDNLSE HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFS DRSNLSR HIR THTGEKPFACDICGRKFA DSSARNT HTKIHTGEKPFQCRICMRKFA PNSDRTK HTKIHLRQKDAARGS <u>GGDAKSLTAW</u> SRTLVTFFKDVFDFTREEW <u>KLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSSVRS</u>
71424 (238)	MAPKKRKVGVPAAEAERPFQCRICMRNFS RSADLTR HIRTHTGEKPFACDICGRKFA QSANRTK HTKIHTHPRAPIPKPFQCRICMRNFS RSNDNLS E HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFS DRSNLSR HIRTHTGEKPFACDICGRKFA DSSARNT HTKIHLRQKDA <u>ARGSGDAKSLTAW</u> SRTLVTFFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFE IKSSVRS

FIG. 15 Continued

71437 (239)	MAPKKRKVGVPAAEAERPFQCRICMRNFSQSSNLARHIRTHTGEKPFACDICGRKFADSSDRKKHTKIHTHPRAPIPKPFQCRICMRNFSRSDHLS EHIRTHTGEKPFACDICGRKFARNDRITHTKIHTGSQKPFQCRICMRNFSRSADLTRHIRTHTGEKPFACDICGRKFASANRTKHTKIHLROKDA ARGSGDAKSLTAWSR TLVTFKDV FVDF TREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFE IKSSVRS
71447 (240)	MAPKKRKVGVPAAEAERPFQCRICMRNFS TSGNLTRHIRTHTGEKPFACDICGRKF AQNTLTMHTKIHTGSQKPFQCRICMRKFARSDNLTRHTK IHTGEKPFQCRICMRNFSDRSHLTRHIRTHTGEKPFACDICGRKFADRSNLTRHTKIHLROKDAARGSGDAKSLTAWSR TLVTFKDV FVDF TREEW KLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKSSVRS
71448 (241)	MAPKKRKVGVPAAEAERPFQCRICMRNFS TSGNLTRHIRTHTGEKPFACDICGRKF AQNTLTMHTKIHTGSQKPFQCRICMRNFSRSDNLARHIR THTGEKPFACDICGRKFADRSHLARHTKIHTGSQKPFQCRICMRNFSDRSNLSRHIRTHTGEKPFACDICGRKFADAFTRTRHTKIHLROKDAARGSG GDAKSLTAWSR TLVTFKDV FVDF TREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

ZFP ID	Amino Acid sequence (helix, ZF linker, & interdomain linker)
71463 (242)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS RSANLAR <u>HI</u> <u>RT</u> <u>HT</u> <u>GE</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>R</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>R</u> <u>S</u> <u>D</u> <u>A</u> <u>L</u> <u>S</u> <u>E</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>Q</u> <u>N</u> <u>A</u> <u>T</u> <u>R</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>L</u> <u>R</u> <u>O</u> <u>K</u> <u>D</u> <u>A</u> <u>A</u> <u>R</u> <u>G</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>
71467 (243)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS RSDSL <u>S</u> <u>A</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>R</u> <u>S</u> <u>D</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>Q</u> <u>S</u> <u>G</u> <u>D</u> <u>L</u> <u>T</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>T</u> <u>Q</u> <u>C</u> <u>Y</u> <u>L</u> <u>R</u> <u>K</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>R</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>
71468 (244)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS RSDL <u>S</u> <u>K</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>Q</u> <u>N</u> <u>A</u> <u>T</u> <u>R</u> <u>T</u> <u>K</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>R</u> <u>S</u> <u>A</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>T</u> <u>S</u> <u>A</u> <u>N</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>L</u> <u>R</u> <u>O</u> <u>K</u> <u>D</u> <u>A</u> <u>A</u> <u>R</u> <u>G</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>
71470 (245)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS QSGDL <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>T</u> <u>Q</u> <u>C</u> <u>Y</u> <u>L</u> <u>R</u> <u>K</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>R</u> <u>S</u> <u>D</u> <u>N</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>L</u> <u>R</u> <u>O</u> <u>K</u> <u>D</u> <u>A</u> <u>A</u> <u>R</u> <u>G</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>
71472 (246)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS DRSHL <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>A</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>P</u> <u>R</u> <u>A</u> <u>P</u> <u>I</u> <u>P</u> <u>K</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>R</u> <u>S</u> <u>A</u> <u>H</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>T</u> <u>S</u> <u>A</u> <u>N</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>S</u> <u>Q</u> <u>K</u> <u>P</u> <u>F</u> <u>Q</u> <u>C</u> <u>R</u> <u>I</u> <u>C</u> <u>M</u> <u>R</u> <u>N</u> <u>F</u> <u>S</u> <u>D</u> <u>S</u> <u>S</u> <u>H</u> <u>R</u> <u>T</u> <u>R</u> <u>H</u> <u>I</u> <u>R</u> <u>T</u> <u>H</u> <u>T</u> <u>G</u> <u>E</u> <u>K</u> <u>P</u> <u>F</u> <u>A</u> <u>C</u> <u>D</u> <u>I</u> <u>C</u> <u>G</u> <u>R</u> <u>K</u> <u>F</u> <u>A</u> <u>M</u> <u>Q</u> <u>N</u> <u>Y</u> <u>L</u> <u>S</u> <u>R</u> <u>H</u> <u>T</u> <u>K</u> <u>I</u> <u>N</u> <u>T</u> <u>H</u> <u>L</u> <u>R</u> <u>O</u> <u>K</u> <u>D</u> <u>A</u> <u>A</u> <u>R</u> <u>G</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>

FIG. 15 Continued

71485 (247)	MAPKKRKXVGPAAEAERPFQCRICMRNFS RS DHLSNHIRHTHTGEKPFACDICGRKFAR SDDRKK HTKIHITGSQKPFQCRICMRNFS RS DHLS TH IR THTGEKPFACDICGRKFAT NSNRIT HTKIHITGSQKPFQCRICMRNFS SA HL SR HIRHTHTGEKPFACDICGRKFAD RS DLSRHTKIHILROKDAAGS GGDAKSLTAW S RTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILREKGEEPWLVEREIHQETHPDSETAFEIKSS VRS
71503 (248)	MAPKKRKXVGPAAEAERPFQCRICMRNFS RS DNLSNHIRHTHTGEKPFACDICGRKFAT SSSRIN HTKIHITGSQKPFQCRICMRNFS RS DALS SV HIR THTGEKPFACDICGRKFAD SSHRTR HTKIHITGSQKPFQCRICMRNFS DS SH TR HIRHTHTGEKPFACDICGRKFA AKWN IDAHTKIHILROKDAAGS GGDAKSLTAW S RTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILREKGEEPWLVEREIHQETHPDSETAFEIKSS VRS

FIG. 15 Continued

ZFP ID	Target Sequence (capital letters)	DNA Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
65918	cgGCAGAAGGTGGGcGGTGGCgg (249)	^DRSHLTR (250)	0f	LKQHLTR (139)	1c	RSAHLNR (104)	0f	TSGHLNR (103)	0c	^QSGNLAR (262)	0f	QSGDLTR (119)	C1k
73015	gcAGCGGCGCTGCTGTTGGTgc (62)	^LRHHLTR (251)	0f	HRSARKR (136)	0c	QSSDLNR (105)	0f	HRSTRNR (173)	0c	DRSHLTR (109)	0f	NSRNLNR (191)	C1k
73016	gcAGCGGCGCTGCTGTTGGTgc (62)	LRHHLTR (92)	0f	HRSARKR (136)	0c	^QSSDLNR (257)	0f	HRSTRNR (173)	0c	DRSHLTR (109)	0f	NSRNLNR (191)	C1k
73017	gcAGCGGCGCTGCTGTTGGTgc (62)	LRHHLTR (92)	0f	HRSARKR (136)	0c	QSSDLNR (105)	0f	HRSTRNR (173)	0c	^DRSHLTR (250)	0f	NSRNLNR (191)	C1k
73018	gcAGCGGCGCTGCTGTTGGTgc (62)	^LRHHLTR (251)	0f	HRSARKR (136)	0c	^QSSDLNR (257)	0f	HRSTRNR (173)	0c	DRSHLTR (109)	0f	NSRNLNR (191)	C1k
73019	gcAGCGGCGCTGCTGTTGGTgc (62)	^LRHHLTR (251)	0f	HRSARKR (136)	0c	QSSDLNR (105)	0f	HRSTRNR (173)	0c	^DRSHLTR (250)	0f	NSRNLNR (191)	C1k
73020	gcAGCGGCGCTGCTGTTGGTgc (62)	LRHHLTR (92)	0f	HRSARKR (136)	0c	^QSSDLNR (257)	0f	HRSTRNR (173)	0c	^DRSHLTR (250)	0f	NSRNLNR (191)	C1k
73021	gcAGCGGCGCTGCTGTTGGTgc (62)	^LRHHLTR (251)	0f	HRSARKR (136)	0c	^QSSDLNR (257)	0f	HRSTRNR (173)	0c	^DRSHLTR (250)	0f	NSRNLNR (191)	C1k
73029	agAAGGTGgGCGGTGGCAGCGgc (64)	^RSDDLNR (252)	0f	QSATNRK (138)	0c	RSDVLSK (162)	0f	RSDDNRK (174)	1c	RQDCLSL (163)	0f	RNDNRKT (175)	C1k
73030	agAAGGTGgGCGGTGGCAGCGgc (64)	RSDDLNR (108)	0f	QSATNRK (138)	0c	^RSDVLSK (258)	0f	RSDDNRK (174)	1c	RQDCLSL (163)	0f	RNDNRKT (175)	C1k
73031	agAAGGTGgGCGGTGGCAGCGgc (64)	RSDDLNR (108)	0f	QSATNRK (138)	0c	RSDVLSK (162)	0f	RSDDNRK (174)	1c	^RQDCLSL (263)	0f	RNDNRKT (175)	C1k
73032	agAAGGTGgGCGGTGGCAGCGgc (64)	^RSDDLNR (252)	0f	QSATNRK (138)	0c	^RSDVLSK (258)	0f	RSDDNRK (174)	1c	RQDCLSL (163)	0f	RNDNRKT (175)	C1k
73034	agAAGGTGgGCGGTGGCAGCGgc (64)	RSDDLNR (108)	0f	QSATNRK (138)	0c	^RSDVLSK (258)	0f	RSDDNRK (174)	1c	^RQDCLSL (263)	0f	RNDNRKT (175)	C1k
73035	agAAGGTGgGCGGTGGCAGCGgc (64)	^RSDDLNR (252)	0f	QSATNRK (138)	0c	^RSDVLSK (258)	0f	RSDDNRK (174)	1c	^RQDCLSL (263)	0f	RNDNRKT (175)	C1k
73120	ccTCTGTGCGACTATCAGgt (77)	^RSDNLSE (253)	0f	TSSNRKT (145)	0c	DRSNLNR (161)	0f	DSSARNR (176)	0a	RNSDRTK (184)	C1k		
73121	ccTCTGTGCGACTATCAGgt (77)	RSDNLSE (113)	0f	TSSNRKT (145)	0c	^DRSNLNR (259)	0f	DSSARNR (176)	0a	RNSDRTK (184)	C1k		
73122	ccTCTGTGCGACTATCAGgt (77)	RSDNLSE (113)	0f	TSSNRKT (145)	0c	DRSNLNR (161)	0f	DSSARNR (176)	0a	^RNSDRTK (264)	C1k		
73123	ccTCTGTGCGACTATCAGgt (77)	^RSDNLSE (253)	0f	TSSNRKT (145)	0c	^DRSNLNR (259)	0f	DSSARNR (176)	0a	RNSDRTK (184)	C1k		

FIG. 16

SUBSTITUTE SHEET (RULE 26)

ZFP ID	Target Sequence (capital letters)	DNA Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
73124	ccTCTGTCGACTATCAGgt (77)	[^] RSDNLSE (253)	0f	TSSNRKT (145)	0c	DRSNLSR (161)	0f	DSSARNT (176)	0a	[^] RNSDRTK (264)	C1k		
73125	ccTCTGTCGACTATCAGgt (77)	RSDNLSE (113)	0f	TSSNRKT (145)	0c	[^] DRSNLSR (259)	0f	DSSARNT (176)	0a	[^] RNSDRTK (264)	C1k		
73126	ccTCTGTCGACTATCAGgt (77)	[^] RSDNLSE (253)	0f	TSSNRKT (145)	0c	[^] DRSNLSR (259)	0f	DSSARNT (176)	0a	[^] RNSDRTK (264)	C1k		
73127	ctGTCGACTATCAGgTAAGCGcc (78)	[^] RSADLTR (254)	0f	QSARNRK (146)	1c	RSDNLSE (113)	0f	TSSNRKT (145)	0c	DRSNLSR (161)	0f	DSSARNT (176)	C1k
73128	ctGTCGACTATCAGgTAAGCGcc (78)	RSADLTR (89)	0f	QSARNRK (146)	1c	[^] RSDNLSE (253)	0f	TSSNRKT (145)	0c	DRSNLSR (161)	0f	DSSARNT (176)	C1k
73129	ctGTCGACTATCAGgTAAGCGcc (78)	RSADLTR (89)	0f	QSARNRK (146)	1c	RSDNLSE (113)	0f	TSSNRKT (145)	0c	[^] DRSNLSR (259)	0f	DSSARNT (176)	C1k
73130	ctGTCGACTATCAGgTAAGCGcc (78)	[^] RSADLTR (254)	0f	QSARNRK (146)	1c	[^] RSDNLSE (253)	0f	TSSNRKT (145)	0c	DRSNLSR (161)	0f	DSSARNT (176)	C1k
73131	ctGTCGACTATCAGgTAAGCGcc (78)	[^] RSADLTR (254)	0f	QSARNRK (146)	1c	RSDNLSE (113)	0f	TSSNRKT (145)	0c	[^] DRSNLSR (259)	0f	DSSARNT (176)	C1k
73133	ctGTCGACTATCAGgTAAGCGcc (78)	RSADLTR (89)	0f	QSARNRK (146)	1c	[^] RSDNLSE (253)	0f	TSSNRKT (145)	0c	[^] DRSNLSR (259)	0f	DSSARNT (176)	C1k
73190	gcGCCGGGCATCGGTCGGGGcc (87)	[^] RSDHLSN (255)	0f	RSDDRKK (152)	0c	RSDHLSL (166)	0f	TNSNRIT (178)	0c	RSAHLSR (104)	0f	DRSDLSR (195)	C1k
73191	gcGCCGGGCATCGGTCGGGGcc (87)	RSDHLSN (120)	0f	RSDDRKK (152)	0c	[^] RSDHLSL (260)	0f	TNSNRIT (178)	0c	RSAHLSR (104)	0f	DRSDLSR (195)	C1k
73192	gcGCCGGGCATCGGTCGGGGcc (87)	RSDHLSN (120)	0f	RSDDRKK (152)	0c	RSDHLSL (166)	0f	TNSNRIT (178)	0c	[^] RSAHLSR (265)	0f	DRSDLSR (195)	C1k
73193	gcGCCGGGCATCGGTCGGGGcc (87)	[^] RSDHLSN (255)	0f	RSDDRKK (152)	0c	[^] RSDHLSL (260)	0f	TNSNRIT (178)	0c	RSAHLSR (104)	0f	DRSDLSR (195)	C1k
73194	gcGCCGGGCATCGGTCGGGGcc (87)	[^] RSDHLSN (255)	0f	RSDDRKK (152)	0c	RSDHLSL (166)	0f	TNSNRIT (178)	0c	[^] RSAHLSR (265)	0f	DRSDLSR (195)	C1k
73195	gcGCCGGGCATCGGTCGGGGcc (87)	RSDHLSN (120)	0f	RSDDRKK (152)	0c	[^] RSDHLSL (260)	0f	TNSNRIT (178)	0c	[^] RSAHLSR (265)	0f	DRSDLSR (195)	C1k
73196	gcGCCGGGCATCGGTCGGGGcc (87)	[^] RSDHLSN (255)	0f	RSDDRKK (152)	0c	[^] RSDHLSL (260)	0f	TNSNRIT (178)	0c	[^] RSAHLSR (265)	0f	DRSDLSR (195)	C1k
73197	gcCAGGCGGCCTGGAAAGGga (88)	[^] RSDNLSN (256)	0f	TSSSRIN (153)	0c	RSDALSV (167)	0f	DSSHRTR (101)	0c	DSSHRTR (101)	0f	AKWNLDA (196)	C1k
73198	gcCAGGCGGCCTGGAAAGGga (88)	RSDNLSN (121)	0f	TSSSRIN (153)	0c	[^] RSDALSV (261)	0f	DSSHRTR (101)	0c	DSSHRTR (101)	0f	AKWNLDA (196)	C1k

FIG. 16 Continued

SUBSTITUTE SHEET (RULE 26)

ZFP ID	Target Sequence (capital letters)	DNA Recognition Helix Amino Acid Sequence Within Each Finger											
		F1	L1	F2	L2	F3	L3	F4	L4	F5	L5	F6	L6
73199	gcCAGGGCGGCCTGGAAAGGga (88)	RSDNLSN (121)	0f	TSSSRIN (153)	0c	RSDALSV (167)	0f	DSSHRTR (101)	0c	^DSSHRTR (266)	0f	AKWNLDA (196)	C1k
73200	gcCAGGGCGGCCTGGAAAGGga (88)	^RSDNLSN (256)	0f	TSSSRIN (153)	0c	^RSDALSV (261)	0f	DSSHRTR (101)	0c	DSSHRTR (101)	0f	AKWNLDA (196)	C1k
73201	gcCAGGGCGGCCTGGAAAGGga (88)	^RSDNLSN (256)	0f	TSSSRIN (153)	0c	RSDALSV (167)	0f	DSSHRTR (101)	0c	^DSSHRTR (266)	0f	AKWNLDA (196)	C1k
73202	gcCAGGGCGGCCTGGAAAGGga (88)	RSDNLSN (121)	0f	TSSSRIN (153)	0c	^RSDALSV (261)	0f	DSSHRTR (101)	0c	^DSSHRTR (266)	0f	AKWNLDA (196)	C1k
73203	gcCAGGGCGGCCTGGAAAGGga (88)	^RSDNLSN (256)	0f	TSSSRIN (153)	0c	^RSDALSV (261)	0f	DSSHRTR (101)	0c	^DSSHRTR (266)	0f	AKWNLDA (196)	C1k

FIG. 16 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
65918 (267)	MAPKKRKVGVPAAEAERPFQCRICM <u>QNFSDRS</u> <u>HLTR</u> HIRTHTGEKPFACDICGRKFA <u>LKQHLTR</u> HHTKIHTHPAPIPKPFQCRICMRNFS <u>RS</u> <u>AHL</u> <u>SR</u> HIRTHTGEKPFACDICGRKFA <u>TS</u> <u>GHLSR</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>Q</u> <u>SC</u> <u>N</u> <u>L</u> <u>A</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>Q</u> <u>S</u> <u>G</u> <u>D</u> <u>L</u> <u>T</u> <u>R</u> HHTKIHLRQKDAAR <u>G</u> <u>S</u> <u>G</u> <u>G</u> <u>D</u> <u>A</u> <u>K</u> <u>S</u> <u>L</u> <u>T</u> <u>A</u> <u>W</u> <u>S</u> <u>R</u> <u>T</u> <u>L</u> <u>V</u> <u>T</u> <u>F</u> <u>K</u> <u>D</u> <u>V</u> <u>F</u> <u>D</u> <u>T</u> <u>R</u> <u>E</u> <u>E</u> <u>W</u> <u>K</u> <u>L</u> <u>L</u> <u>D</u> <u>T</u> <u>A</u> <u>Q</u> <u>I</u> <u>V</u> <u>Y</u> <u>R</u> <u>N</u> <u>V</u> <u>M</u> <u>L</u> <u>E</u> <u>N</u> <u>Y</u> <u>K</u> <u>N</u> <u>L</u> <u>V</u> <u>S</u> <u>L</u> <u>G</u> <u>Y</u> <u>Q</u> <u>L</u> <u>T</u> <u>K</u> <u>P</u> <u>D</u> <u>V</u> <u>I</u> <u>L</u> <u>R</u> <u>L</u> <u>E</u> <u>K</u> <u>G</u> <u>E</u> <u>E</u> <u>P</u> <u>W</u> <u>L</u> <u>V</u> <u>E</u> <u>R</u> <u>E</u> <u>I</u> <u>H</u> <u>Q</u> <u>E</u> <u>T</u> <u>H</u> <u>P</u> <u>D</u> <u>S</u> <u>E</u> <u>T</u> <u>A</u> <u>F</u> <u>E</u> <u>I</u> <u>K</u> <u>S</u> <u>S</u> <u>V</u> <u>R</u> <u>S</u>
73015 (268)	MAPKKRKVGVPAAEAERPFQCRICM <u>QNF</u> <u>SR</u> <u>HLTR</u> HIRTHTGEKPFACDICGRKFA <u>HRS</u> <u>AKR</u> HHTKIHTGSQKPFQCRICMRNFS <u>Q</u> <u>S</u> <u>S</u> <u>D</u> <u>L</u> <u>S</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HR</u> <u>STR</u> <u>NR</u> HHTKIHTGSQKPFQCRICMRNFS <u>DR</u> <u>S</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>F</u> <u>A</u> <u>N</u> <u>S</u> <u>R</u> <u>N</u> <u>L</u> <u>R</u> HHTKIHLRQKDAARGSGGDAKSLTAWSR ^T LVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVVEREIHQETHPDSETAFEIKSSVRS
73016 (269)	MAPKKRKVGVPAAEAERPFQCRICMRNFS <u>LR</u> <u>H</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HRS</u> <u>AKR</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>Q</u> <u>S</u> <u>S</u> <u>D</u> <u>L</u> <u>S</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HR</u> <u>STR</u> <u>NR</u> HHTKIHTGSQKPFQCRICMRNFS <u>DR</u> <u>S</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>F</u> <u>A</u> <u>N</u> <u>S</u> <u>R</u> <u>N</u> <u>L</u> <u>R</u> HHTKIHLRQKDAARGSGGDAKSLTAWSR ^T LVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVVEREIHQETHPDSETAFEIKSSVRS
73017 (270)	MAPKKRKVGVPAAEAERPFQCRICMRNFS <u>LR</u> <u>H</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HRS</u> <u>AKR</u> HHTKIHTGSQKPFQCRICMRNFS <u>Q</u> <u>S</u> <u>S</u> <u>D</u> <u>L</u> <u>S</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HR</u> <u>STR</u> <u>NR</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>Q</u> <u>S</u> <u>D</u> <u>R</u> <u>S</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>F</u> <u>A</u> <u>N</u> <u>S</u> <u>R</u> <u>N</u> <u>L</u> <u>R</u> HHTKIHLRQKDAARGSGGDAKSLTAWSR ^T LVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVVEREIHQETHPDSETAFEIKSSVRS
73018 (271)	MAPKKRKVGVPAAEAERPFQCRICM <u>QNF</u> <u>SR</u> <u>HLTR</u> HIRTHTGEKPFACDICGRKFA <u>HRS</u> <u>AKR</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>Q</u> <u>S</u> <u>S</u> <u>D</u> <u>L</u> <u>S</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>HR</u> <u>STR</u> <u>NR</u> HHTKIHTGSQKPFQCRICMRNFS <u>DR</u> <u>S</u> <u>H</u> <u>L</u> <u>T</u> <u>R</u> HIRTHTGEKPFACDICGRKFA <u>F</u> <u>A</u> <u>N</u> <u>S</u> <u>R</u> <u>N</u> <u>L</u> <u>R</u> HHTKIHLRQKDAARGSGGDAKSLTAWSR ^T LVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVVEREIHQETHPDSETAFEIKSSVRS

FIG. 17

73019 (272)	MAPKKRKVGVPAAERPFQCRICM <u>QNFSLRHHLTR</u> HIRHTGKPFACDICGRKFAHRSARKRHHTKIHTGSQKPFQCRICMNFSSQSDLSRHIRT HTGKPFACDICGRKFAHRSRNRHTKIHTGSQKPFQCRICM <u>QNFSDRSHLTR</u> HIRHTGKPFACDICGRKFANSRNLRNHTKIHLROKDAARGSGG DAKSLTAWSRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLKGEEPWLVEREIHQETHPDSETAFETIKSSVRS
73020 (273)	MAPKKRKVGVPAAERPFQCRICMNFSLRHHLTRHIRHTGKPFACDICGRKFAHRSARKRHHTKIHTGSQKPFQCRICM <u>QNFSSQSDLSRHIRT</u> HTGKPFACDICGRKFAHRSRNRHTKIHTGSQKPFQCRICM <u>QNFSDRSHLTR</u> HIRHTGKPFACDICGRKFANSRNLRNHTKIHLROKDAARGSGG DAKSLTAWSRTLVTFKDVFDFTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLKGEEPWLVEREIHQETHPDSETAFETIKSSVRS

FIG. 17 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
73021 (274)	MAPKKRKVGVPAAAEFPQCRI ~~CMQNFSLRHHLTR~~ HIRHTGKPPFACDICGRKFA HSAR KRH ~~HTKIHTGSQKPFQCRICM~~ ~~QNFSSDLSR~~ HIHRT HTGEKPFACDICGRKFA HSRSTR NRHTKIHTGSQKPFQCRICM ~~QNFSDRSHLTR~~ HIRHTGKPPFACDICGRKFA NSRN LNRHTKIHLRQKDAAR GGG DAKSLTAWSTRILVTFKDVFDFTREWKLLDTAQQIVYRNVML ~~ENYKNLVSLGYQLTKPDVILRLEKGEE~~ PWLVEREIHQETHPDSETAFEIKSSVRS
73029 (275)	MAPKKRKVGVPAAAEFPQCRI ~~CMQNFSSDDLSK~~ HIRHTGKPPFACDICGRKFA QSAT RTK ~~HTKIHTGSQKPFQCRICM~~ ~~QNFSSRSDVLSK~~ HIHRT HTGEKPFACDICGRKFA RSDDR IKHTKIHTHPRAPIPKPFQCRICM ~~QNFSSRQDCLSL~~ HIRHTGKPPFACDICGRKFA RNDNR KTH ~~TKIHLRQKDAAR~~ ~~GSGGDAKSLTAWSTRILVTFKDVFDFTREWKLLDTAQQIVYRNVML~~ ENYKNLVSLGYQLTKPDVILRLEKGEE PWLVERE IQETHPDSETAFEIKS SVRS
73030 (276)	MAPKKRKVGVPAAAEFPQCRI ~~CMQNFSSDDLSK~~ HIRHTGKPPFACDICGRKFA QSAT RTK ~~HTKIHTGSQKPFQCRICM~~ ~~QNFSSRSDVLSK~~ HIHRT HTGEKPFACDICGRKFA RSDDR IKHTKIHTHPRAPIPKPFQCRICM ~~QNFSSRQDCLSL~~ HIRHTGKPPFACDICGRKFA RNDNR KTH ~~TKIHLRQKDAAR~~ ~~GSGGDAKSLTAWSTRILVTFKDVFDFTREWKLLDTAQQIVYRNVML~~ ENYKNLVSLGYQLTKPDVILRLEKGEE PWLVERE IQETHPDSETAFEIKS SVRS
73031 (277)	MAPKKRKVGVPAAAEFPQCRI ~~CMQNFSSDDLSK~~ HIRHTGKPPFACDICGRKFA QSAT RTK ~~HTKIHTGSQKPFQCRICM~~ ~~QNFSSRSDVLSK~~ HIHRT HTGEKPFACDICGRKFA RSDDR IKHTKIHTHPRAPIPKPFQCRICM ~~QNFSSRQDCLSL~~ HIRHTGKPPFACDICGRKFA RNDNR KTH ~~TKIHLRQKDAAR~~ ~~GSGGDAKSLTAWSTRILVTFKDVFDFTREWKLLDTAQQIVYRNVML~~ ENYKNLVSLGYQLTKPDVILRLEKGEE PWLVERE IQETHPDSETAFEIKS SVRS
73032 (278)	MAPKKRKVGVPAAAEFPQCRI ~~CMQNFSSDDLSK~~ HIRHTGKPPFACDICGRKFA QSAT RTK ~~HTKIHTGSQKPFQCRICM~~ ~~QNFSSRSDVLSK~~ HIHRT HTGEKPFACDICGRKFA RSDDR IKHTKIHTHPRAPIPKPFQCRICM ~~QNFSSRQDCLSL~~ HIRHTGKPPFACDICGRKFA RNDNR KTH ~~TKIHLRQKDAAR~~ ~~GSGGDAKSLTAWSTRILVTFKDVFDFTREWKLLDTAQQIVYRNVML~~ ENYKNLVSLGYQLTKPDVILRLEKGEE PWLVERE IQETHPDSETAFEIKS SVRS

FIG. 17 Continued

73034 (279)	MAPKKRKVGVPAAAEFPQCRI ~~CM~~ RNF ~~SR~~ SD ~~DL~~ SKHIRTHTGEKPFACDICGRKFAQ Q SAT R TKHTKIHTGSQKPFQCRICM Q NF ~~SR~~ SD ~~V~~ L S KHIRT HTGEKPFACDICGRKFA RSDD RIKHTKIHTHPRAPIPKPFQCRICM Q NF ~~SR~~ QD CLSLHIRTHTGEKPFACDICGRKFA RND NRKTHTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVVDFTREWKLLDTAQIIVYRNVMLENYKNLVSLGYQLTKPDVILRLKGEEPWLVEREIHQETHPDSETAFEIKS SVRS
73035 (280)	MAPKKRKVGVPAAAEFPQCRI ~~CM~~ NF ~~SR~~ SD ~~DL~~ SKHIRTHTGEKPFACDICGRKFAQ Q SAT R TKHTKIHTGSQKPFQCRICM Q NF ~~SR~~ SD ~~V~~ L S KHIRT HTGEKPFACDICGRKFA RSDD RIKHTKIHTHPRAPIPKPFQCRICM Q NF ~~SR~~ QD CLSLHIRTHTGEKPFACDICGRKFA RND NRKTHTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVVDFTREWKLLDTAQIIVYRNVMLENYKNLVSLGYQLTKPDVILRLKGEEPWLVEREIHQETHPDSETAFEIKS SVRS

FIG. 17 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
73120 (281)	MAPKKRKVGVPAAAEPRFQCRICM <u>QNF</u> SRSDNLSE HIRHTHTGKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICM NFSDRSNLSR HIRT HTGKPFACDICGRKFA DSSARNT HTKIHTGKPFQCRICM RKFARNSDRTK HTKIHLRQKDAARGSGGDAKSLTAWSRITLVTFKDVFDVFTREEWKL LDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPNLVEREIHQETHPDSETAFEIKSSVRS
73121 (281)	MAPKKRKVGVPAAAEPRFQCRICM <u>QNF</u> SRSDNLSE HIRHTHTGKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICM NFSDRSNLSR HIRT HTGKPFACDICGRKFA DSSARNT HTKIHTGKPFQCRICM RKFARNSDRTK HTKIHLRQKDAARGSGGDAKSLTAWSRITLVTFKDVFDVFTREEWKL LDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPNLVEREIHQETHPDSETAFEIKSSVRS
73122 (282)	MAPKKRKVGVPAAAEPRFQCRICM NF SRSDNLSE HIRHTHTGKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICM NFSDRSNLSR HIRT HTGKPFACDICGRKFA DSSARNT HTKIHTGKPFQCRICM <u>QNF</u> ARNSDRTK HTKIHLRQKDAARGSGGDAKSLTAWSRITLVTFKDVFDVFTREEWKL LDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPNLVEREIHQETHPDSETAFEIKSSVRS
73123 (283)	MAPKKRKVGVPAAAEPRFQCRICM <u>QNF</u> SRSDNLSE HIRHTHTGKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICM <u>QNF</u> SDRSNLSR HIRT HTGKPFACDICGRKFA DSSARNT HTKIHTGKPFQCRICM RKFARNSDRTK HTKIHLRQKDAARGSGGDAKSLTAWSRITLVTFKDVFDVFTREEWKL LDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPNLVEREIHQETHPDSETAFEIKSSVRS
73124 (284)	MAPKKRKVGVPAAAEPRFQCRICM <u>QNF</u> SRSDNLSE HIRHTHTGKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICM NFSDRSNLSR HIRT HTGKPFACDICGRKFA DSSARNT HTKIHTGKPFQCRICM <u>QNF</u> ARNSDRTK HTKIHLRQKDAARGSGGDAKSLTAWSRITLVTFKDVFDVFTREEWKL LDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPNLVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

73125 (285)	MAPKKRKVGVPAAEAERPFQCRICMPNFSRSDNLSEHIRTHTGKPPFACDICGRKFA TSSNRK THTKIHIGSQPFQCRICM QNFSDRSNLSR HIRT HTGKPPFACDICGRKFA DSSARNT THTKIHIGSQPFQCRICM QKFA <u>RNSDR</u> TK HTKIHRLQKDAARGSGGDAKSLTAWSRITLVTFKDVFDFTREEWKL LDTAQQIVYRNVMLNYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKSSVRS
73126 (286)	MAPKKRKVGVPAAEAERPFQCRICM QNFSDNLSE HIRTHTGKPPFACDICGRKFA TSSNRK THTKIHIGSQPFQCRICM QNFSDRSNLSR HIRT HTGKPPFACDICGRKFA DSSARNT THTKIHIGSQPFQCRICM QKFA <u>RNSDR</u> TK HTKIHRLQKDAARGSGGDAKSLTAWSRITLVTFKDVFDFTREEWKL LDTAQQIVYRNVMLNYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKSSVRS
73127 (287)	MAPKKRKVGVPAAEAERPFQCRICM QNFSSADLTR HIRTHTGKPPFACDICGRKFA QSANR THTKIHITHPRAPIPKPFQCRICMPNFSRSDNLSE HIRTHTGKPPFACDICGRKFA TSSNRK THTKIHIGSQPFQCRICMPNFS DRSNLSR HIRTHTGKPPFACDICGRKFA DSSARNT THTKIHRLQKDAAR GSGGDAKSLTAWSRITLVTFKDVFDFTREEWKLLDTAQQIVYRNVMLNYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKS SVRS
73128 (288)	MAPKKRKVGVPAAEAERPFQCRICMPNFS RSADLTR HIRTHTGKPPFACDICGRKFA QSANR THTKIHITHPRAPIPKPFQCRICM QNFSDNLSE HIRTHTGKPPFACDICGRKFA TSSNRK THTKIHIGSQPFQCRICMPNFS DRSNLSR HIRTHTGKPPFACDICGRKFA DSSARNT THTKIHRLQKDAAR GSGGDAKSLTAWSRITLVTFKDVFDFTREEWKLLDTAQQIVYRNVMLNYKNLVSLGYQLTKPDVILRLEKGEEPLVEREIHQETHPDSETAFEIKS SVRS

FIG. 17 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
73129 (289)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSADLTIRHIRTHTGEKPFACDICGRKFAQSANRTKHTKIHTHPRAPIPKPFQCRICMRNFSRSDNLSE HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFSRSDNLSEHIRTHTGEKPFACDICGRKFA DSSARN THTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKS SVRS
73130 (290)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSADLTIRHIRTHTGEKPFACDICGRKFAQSANRTKHTKIHTHPRAPIPKPFQCRICMRNFSRSDNLSE HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFSRSDNLSEHIRTHTGEKPFACDICGRKFA DSSARN THTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKS SVRS
73131 (291)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSADLTIRHIRTHTGEKPFACDICGRKFAQSANRTKHTKIHTHPRAPIPKPFQCRICMRNFSRSDNLSE HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFSRSDNLSEHIRTHTGEKPFACDICGRKFA DSSARN THTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKS SVRS
73133 (292)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSADLTIRHIRTHTGEKPFACDICGRKFAQSANRTKHTKIHTHPRAPIPKPFQCRICMRNFSRSDNLSE HIRTHTGEKPFACDICGRKFA TSSNRKT HTKIHTGSQKPFQCRICMRNFSRSDNLSEHIRTHTGEKPFACDICGRKFA DSSARN THTKIHLROKDAAR GSGGDAKSLTAWSRITLVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKS SVRS
73190 (293)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSDHLNHIHIRTHTGEKPFACDICGRKFA RSDDRKK HTKIHTGSQKPFQCRICMRNFSRSDHLSTHIRT HTGEKPFACDICGRKFA TNSNRI THTKIHTGSQKPFQCRICMRNFSR SAHLSR HIRTHTGEKPFACDICGRKFA DRSDLSR HHTKIHLROKDAAR SGG DAKSLTAWSRITLVTFKDVDFVTREWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEEPWLVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

73191 (294)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSDHLSNHIRHTGKPFACDICGRKFAPSDRKKHTKIHTGSQKPFQCRICM <u>QNF</u> SRSDHLSTHIRT HTGEKPFACDICGRKFATNSNRITHTKIHTGSQKPFQCRICMRNFSR <u>SAHLSR</u> HIRHTGKPFACDICGRKFADRSDLSTRHTKIHLROKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEENLVEREIHQETHPDS ETAFEIKSSVRS
73192 (295)	MAPKKRKVGVPAAEAERPFQCRICMRNFSRSDHLSNHIRHTGKPFACDICGRKFAPSDRKKHTKIHTGSQKPFQCRICMRNFSRSDHLSTHIRT HTGEKPFACDICGRKFATNSNRITHTKIHTGSQKPFQCRICM <u>QNF</u> SRSAHLSRHIRHTGKPFACDICGRKFADRSDLSTRHTKIHLROKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEENLVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
73193 (296)	MAPKKRKVGVPAAAEPPFQCRICM <u>QNF</u> <u>SRSDHLS</u> NHIRTHTGKPFACDICGRKF <u>ARSDDRKK</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>SRSDHLS</u> THIRT HTGEKPFACDICGRKF <u>ATNSNRIT</u> HTTKIHTGSQKPFQCRICM <u>QNF</u> <u>SR</u> <u>SAHLSR</u> HHIRHTHTGKPFACDICGRKF <u>ADSDLSR</u> HHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTFKDVVDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGQLTCPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSSVRS
73194 (297)	MAPKKRKVGVPAAAEPPFQCRICM <u>QNF</u> <u>SRSDHLS</u> NHIRTHTGKPFACDICGRKF <u>ARSDDRKK</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>SRSDHLS</u> THIRT HTGEKPFACDICGRKF <u>ATNSNRIT</u> HTTKIHTGSQKPFQCRICM <u>QNF</u> <u>SR</u> <u>SAHLSR</u> HHIRHTHTGKPFACDICGRKF <u>ADSDLSR</u> HHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTFKDVVDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGQLTCPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSSVRS
73195 (298)	MAPKKRKVGVPAAAEPPFQCRICM <u>QNF</u> <u>SRSDHLS</u> NHIRTHTGKPFACDICGRKF <u>ARSDDRKK</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>SRSDHLS</u> THIRT HTGEKPFACDICGRKF <u>ATNSNRIT</u> HTTKIHTGSQKPFQCRICM <u>QNF</u> <u>SR</u> <u>SAHLSR</u> HHIRHTHTGKPFACDICGRKF <u>ADSDLSR</u> HHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTFKDVVDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGQLTCPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSSVRS
73196 (299)	MAPKKRKVGVPAAAEPPFQCRICM <u>QNF</u> <u>SRSDHLS</u> NHIRTHTGKPFACDICGRKF <u>ARSDDRKK</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>SRSDHLS</u> THIRT HTGEKPFACDICGRKF <u>ATNSNRIT</u> HTTKIHTGSQKPFQCRICM <u>QNF</u> <u>SR</u> <u>SAHLSR</u> HHIRHTHTGKPFACDICGRKF <u>ADSDLSR</u> HHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTFKDVVDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGQLTCPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSSVRS
73197 (300)	MAPKKRKVGVPAAAEPPFQCRICM <u>QNF</u> <u>SRSDNLS</u> NHIRTHTGKPFACDICGRKF <u>ATSSSRIN</u> HHTKIHTGSQKPFQCRICM <u>QNF</u> <u>SRSDALS</u> VHIRT HTGEKPFACDICGRKF <u>ADSSHRT</u> HTTKIHTGSQKPFQCRICM <u>QNF</u> <u>SR</u> <u>SSHRT</u> HHIRHTHTGKPFACDICGRKF <u>AKWNDA</u> HHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTFKDVVDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGQLTCPDVILRLEKGEEFWLVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

73198 (301)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS RSDNLSN HIRTHTEGKPFACDICGRKFA TSSSRIN HTKIHTGSQKPFQCRI CM QNF SRSDALS VHIRT HTGEKPFACDICGRKFA DSSHRT RHTKIHTGSQKPFQCRI CMRNFS DSSHRT RHIRTHTGEKPFACDICGRKFA AKWN LDAHTKIHLROKDAARGSGG DAKSLTAWSR TLVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEFPWLVEREIHQETHPDSETAFEIKSSVRS
73199 (302)	MAPKKRKVGVPAAAEPPFQCRI CMRNFS RSDNLSN HIRTHTEGKPFACDICGRKFA TSSSRIN HTKIHTGSQKPFQCRI CMRNFS RSDALS VHIRT HTGEKPFACDICGRKFA DSSHRT RHTKIHTGSQKPFQCRI CM QNF DSSHRT RHIRTHTGEKPFACDICGRKFA AKWN LDAHTKIHLROKDAARGSGG DAKSLTAWSR TLVTFKDVFDFTREEWKLLDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILRLEKGEFPWLVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

ZFP ID	Amino Acid sequence (helix, R(-5) Q, ZF linker, & interdomain linker)
73200 (303)	MAPKKRKVGVPAAAEERPFQCRICM <u>QNFSRSDNLS</u> NHIRTHTGKPFACDICGRKFA <u>TS</u> SSRINHTKIHTGSQKPFQCRICM <u>QNFSRSDALS</u> VHIRT HTGKPFACDICGRKFA <u>DSS</u> HRTRHTKIHTGSQKPFQCRICM <u>QNFS</u> SSHRTRHIRTHTGKPFACDICGRKFA <u>AKWN</u> LDAHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLIDTAQQIVYRNVMLENYKNLVSLGVQLTKPDVILRLXGGEPLVVEREIHQETHPDSETAFEIKSSVRS
73201 (304)	MAPKKRKVGVPAAAEERPFQCRICM <u>QNFSRSDNLS</u> NHIRTHTGKPFACDICGRKFA <u>TS</u> SSRINHTKIHTGSQKPFQCRICM <u>QNFSRSDALS</u> VHIRT HTGKPFACDICGRKFA <u>DSS</u> HRTRHTKIHTGSQKPFQCRICM <u>QNFS</u> SSHRTRHIRTHTGKPFACDICGRKFA <u>AKWN</u> LDAHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLIDTAQQIVYRNVMLENYKNLVSLGVQLTKPDVILRLXGGEPLVVEREIHQETHPDSETAFEIKSSVRS
73202 (305)	MAPKKRKVGVPAAAEERPFQCRICM <u>QNFSRSDNLS</u> NHIRTHTGKPFACDICGRKFA <u>TS</u> SSRINHTKIHTGSQKPFQCRICM <u>QNFSRSDALS</u> VHIRT HTGKPFACDICGRKFA <u>DSS</u> HRTRHTKIHTGSQKPFQCRICM <u>QNFS</u> SSHRTRHIRTHTGKPFACDICGRKFA <u>AKWN</u> LDAHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLIDTAQQIVYRNVMLENYKNLVSLGVQLTKPDVILRLXGGEPLVVEREIHQETHPDSETAFEIKSSVRS
73203 (306)	MAPKKRKVGVPAAAEERPFQCRICM <u>QNFSRSDNLS</u> NHIRTHTGKPFACDICGRKFA <u>TS</u> SSRINHTKIHTGSQKPFQCRICM <u>QNFSRSDALS</u> VHIRT HTGKPFACDICGRKFA <u>DSS</u> HRTRHTKIHTGSQKPFQCRICM <u>QNFS</u> SSHRTRHIRTHTGKPFACDICGRKFA <u>AKWN</u> LDAHTKIHLRQKDAARGSGG DAKSLTAWSRITLVTEKDVFDFTREEWKLIDTAQQIVYRNVMLENYKNLVSLGVQLTKPDVILRLXGGEPLVVEREIHQETHPDSETAFEIKSSVRS

FIG. 17 Continued

65918- T2A- 57890 (307)	MAPKKRKVGVPAAAEPPQCRICM<u>QNFSTDRSHLR</u>HIRTHTGEKPFACDICGRKFAL<u>KQHLTR</u>HHTKIHTHPRAPIPKPFQCRICMRNFS<u>RS</u>SAHLSR HIRTHTGEKPFACDICGRKFAT<u>TSCHLSR</u>HHTKIHTGSQKPFQCRICM<u>QNF</u>SQSGNLARHIRTHTGEKPFACDICGRKFAT<u>QSCDLTR</u>HHTKIHLROKDAAR GSGDAKSLTAWSRITLVTFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILREKGEPPWLVEREIHQETHPDSETAFEIKS SVRSQSGEGRGSLLTCGDVEENPGPRATMAPKKRKRVGVPAAAEPPQCRICMRNFS<u>LRHHLTR</u>HIRTHTGEKPFACDICGRKFAR<u>RRFTLSK</u>HTKIH TGSQKPFQCRICMRNFS<u>RS</u>DLSEHIRTHTGEKPFACDICGRKFAT<u>KHSTRRV</u>HHTKIHTGSQKPFQCRICMRNFS<u>RS</u>DLSEHIRTHTGEKPFACDICG RKFA<u>RLYTLHK</u>HHTKIHLROKDAARGSGGDAKSLTAWSRITLVTFKDVFDFTREEWKLDDTAQQIVYRNVMLENYKNLVSLGYQLTKPDVILREKGE PWLVEREIHQETHPDSETAFEIKSSVKL • T2A linker sequence is underlined by a waved line
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FIG. 17 Continued