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(54) Title: ZINC FINGER DOMAINS AND METHODS OF IDENTIFYING SAME

(57) Abstract: Disclosed is an *in vivo* selection method for identifying zinc finger domains that recognize any given target site. Also disclosed are the amino acid sequences of zinc finger domains that recognize particular sites.

CSNR:
T G Q K P Y K C K Q C G K A F G C P S
ACC GGG CAG AAA CCG TAC AAA TGT AAG CAA TGT GGG AAA GCT TTT GGA TGT CCC TCA
-1 2
N L R R H G R T H T G E K P R (SEQ ID NO:23)
AAC CTT CGA AGG CAT GGA AGG ACT CAC ACC GGC GAG AAA CCG CGG (SEQ ID NO:22)
3 6

HSNK:
T G E K P Y K C K E C G K A F N H S S
ACC GGG GAG AAG CCA TAC AAG TGT AAG GAG TGT GGG AAA GCC TTC AAC CAC AGC TCC
-1 2
N F N K H H R I H T G E K P R (SEQ ID NO:25)
AAC TTC AAT AAA CAC CAC AGA ATC CAC ACC GGC GAA AAG CCG CGG (SEQ ID NO:24)
3 6

SSNR:
T G E R P F E C K E C G K A F S S G S
ACC GGG GAG AGG CCA TTT GAA TGT AAG GAA TGT GGG AAA GCC TTT AGT AGT GGT TCA
-1 2
N F T R H Q R I H T G E K P R (SEQ ID NO:27)
AAC TTC ACT CGA CAT CAG AGA ATT CAC ACC GGT GAA AAG CCG CGG (SEQ ID NO:26)
3 6

RDER:
T G Q K P Y V C D V E G C T W K F A R
ACC GGG CAG AAG CCA TAC GTA TGC GAT GTA GAG GGA TGT ACG TGG AAA TTT GCC CGC
-1
S D E L N R H K K R H T G E R P R (SEQ ID NO:29)
TCA GAT GAG CTC AAC AGA CAC AAG AAA AGG CAC ACC GGC GAA AGA CCG CGG (SEQ ID NO:28)
2 3 6

QSTV:
T G E R P Y E C N E C G K A F A Q N S
ACC GGG GAG AGA CCT TAC GAG TGT AAT GAA TGC GGG AAA GCT TTT GCC CAA AAT TCA
-1 2
T L R V H Q R I H T G E K P R (SEQ ID NO:31)
ACT CTC AGA GTA CAC CAG AGA ATT CAC ACC GGC GAA AAG CCG CGG (SEQ ID NO:30)
3 6

VSTR:
T G E R P Y E C N Y C G K T F S V S S
ACC GGG GAG AGG CCT TAT GAG TGT AAT TAC TGT GGA AAA ACC TTT AGT GTG AGC TCA
-1 2
T L I R H Q R I H T G E R P R (SEQ ID NO:33)
ACC CTT ATT AGA CAT CAG AGA ATC CAC ACC GGC GAG AGA CCG CGG (SEQ ID NO:32)
3 6

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