

Fig.1A



Fig.1B

(B)

Fok1 LVKSELEKKSELRHKLKYPHEYIELIEIARNSTODRILEMKYMEFFMKVYGYRGKHILG
ND1 LVKGEMEKKKSDLRHKLKHYPHEYIELIEIADDSKONRLFEFKYVEFLKEYYDYNKGHILG
ND2 IVKSSIEMSKANMRDNLMLPHDYIELIEISQDPYONRIFEMKYMDLFINEYGFSGSHLG
ND3 GIKSNISLLKDELGGIISHISHEYLSLIDLAFDSKONRLFEMKYLELLYNEYGFKGRHILG
ND4 ISKTNILELKDKYRDKLYVDHRYLALIDLAYDGTANRDFEIQIDLLINELKFKGYRLG

Fok1 GSRKPDGAI-YTYGSPIDYGYIYDTKAYSGGYNLPISQADEMORYYEENOTRNKHINPNE
ND1 GSRKPDGAL-YTNGLKTDYGIILDTKAYKDGYSLPISQADEMORYVDENNNRINAIINPNE
ND2 GSRKPDGAM-YAHG----FGYIYDTKAYKDGYNLPISQADEMERYYRENIORNEHYNSNR
ND3 GSRKPDGIY-YSTTLEDNFGIYIYDTKAYSEGYSLPISQADEMERYVRENSNRDEEYVNPNK
ND4 ESRKPDGII SYNIN-----GVIIDNKAYSTGYNLPINQADEMIRYIEENOTRDEKINSNK

Fok1 WWKYYPSSYTEFKFLFVSGHFKNYKAQLTRLNHITNCNGAYLSYEELLIGGEMIKAGTL
ND1 WWKYYPNSILDFFKFLFVSGFFKGDYKKOLARYSNLTKRKAYLSYEQLLLGGEIKDGSL
ND2 WWNIFPEDTNEYKFLFVSGFFKGNFEKQLERISIDTGYGGALSVEHLLLGAEYIKRGIL
ND3 WWENFSEEVKKYFYFVFIGSFKGFEEOLRRLSMTTGYNCSAVNVYNLLGAEKIRSGEM
ND4 WWESFDEKYKDFNYLFVSSFFKGNFKNLKHIANRTGYNGGAINVENLLYFAEELKAGRI

Fok1 TLEEYRRK-FNNGEINF
ND1 TLEDVGDK-FNNDIIF
ND2 TLYDFKNS-FLNKEIOF
ND3 TIEELERAMFNSEFI-
ND4 SYLDSFKM-YNDEIYL

Fig.1C

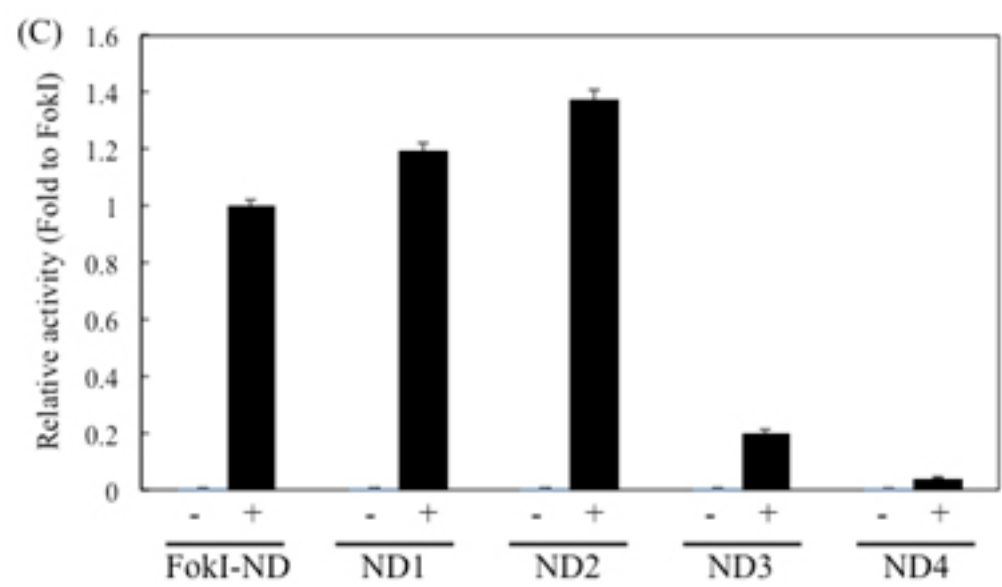


Fig.2A

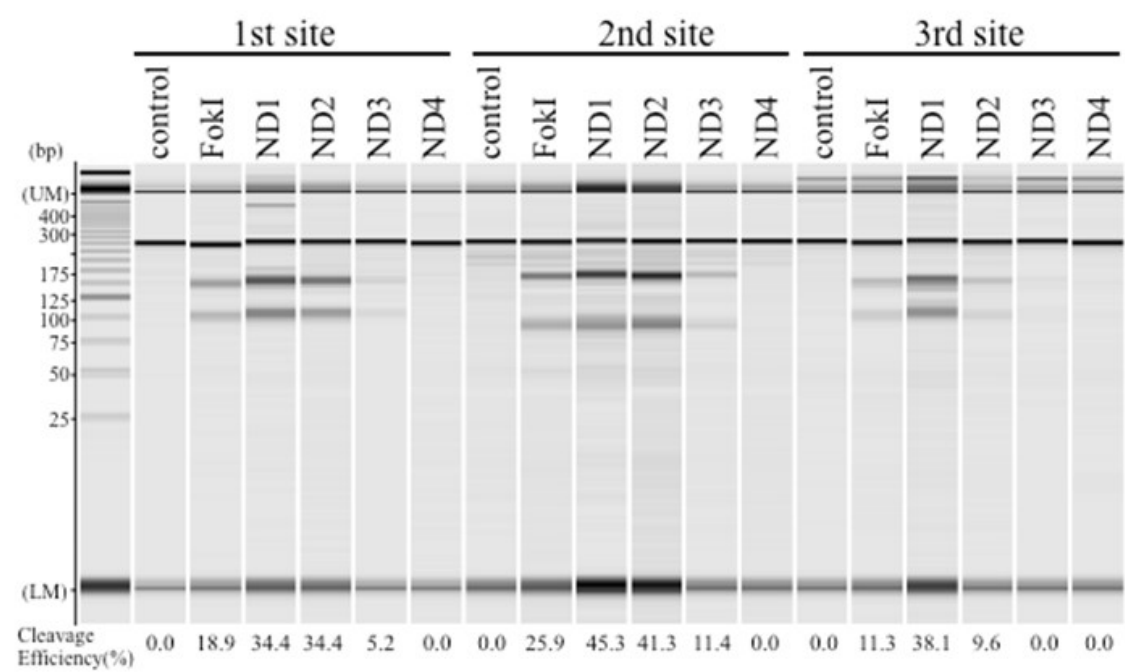


Fig.2B

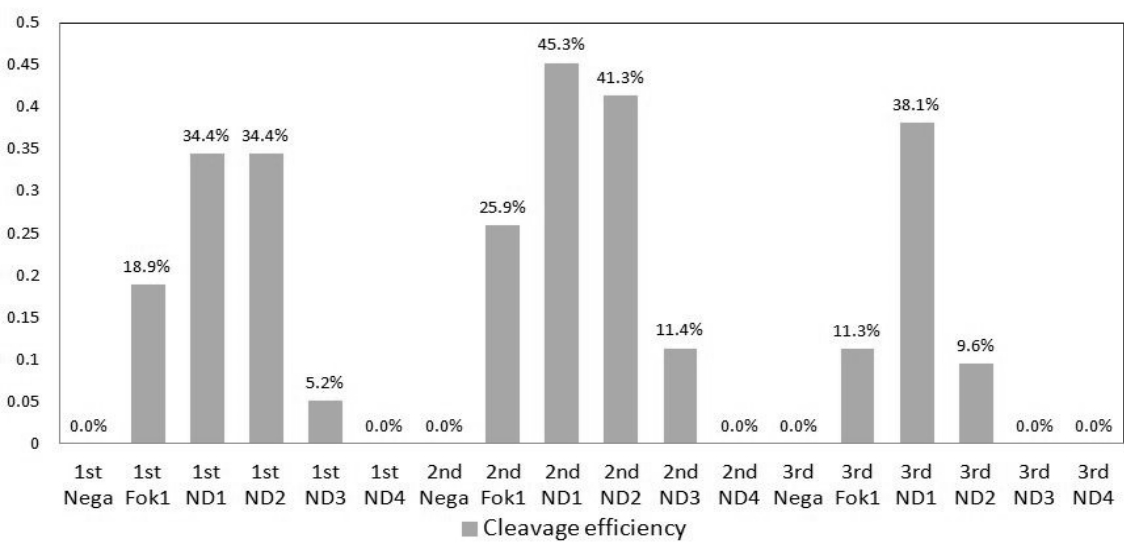


Fig.3

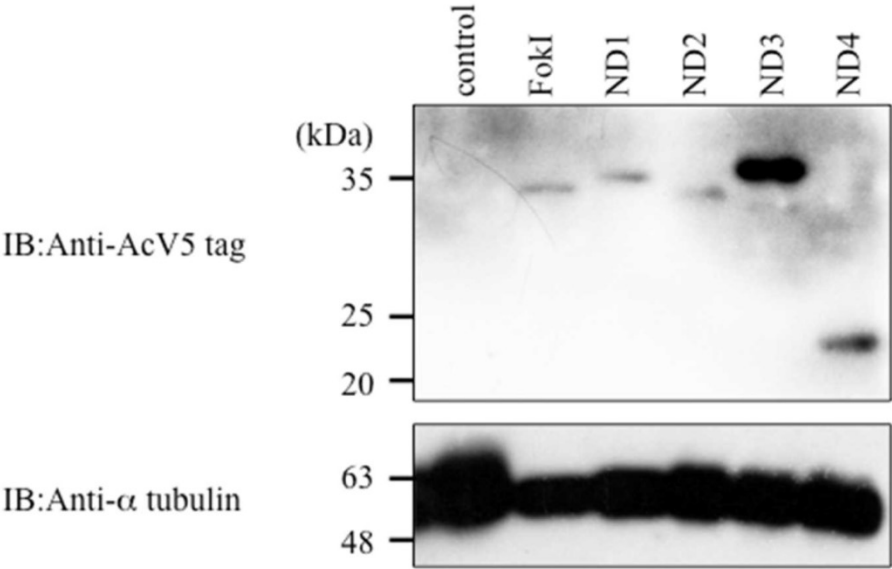


Fig.4

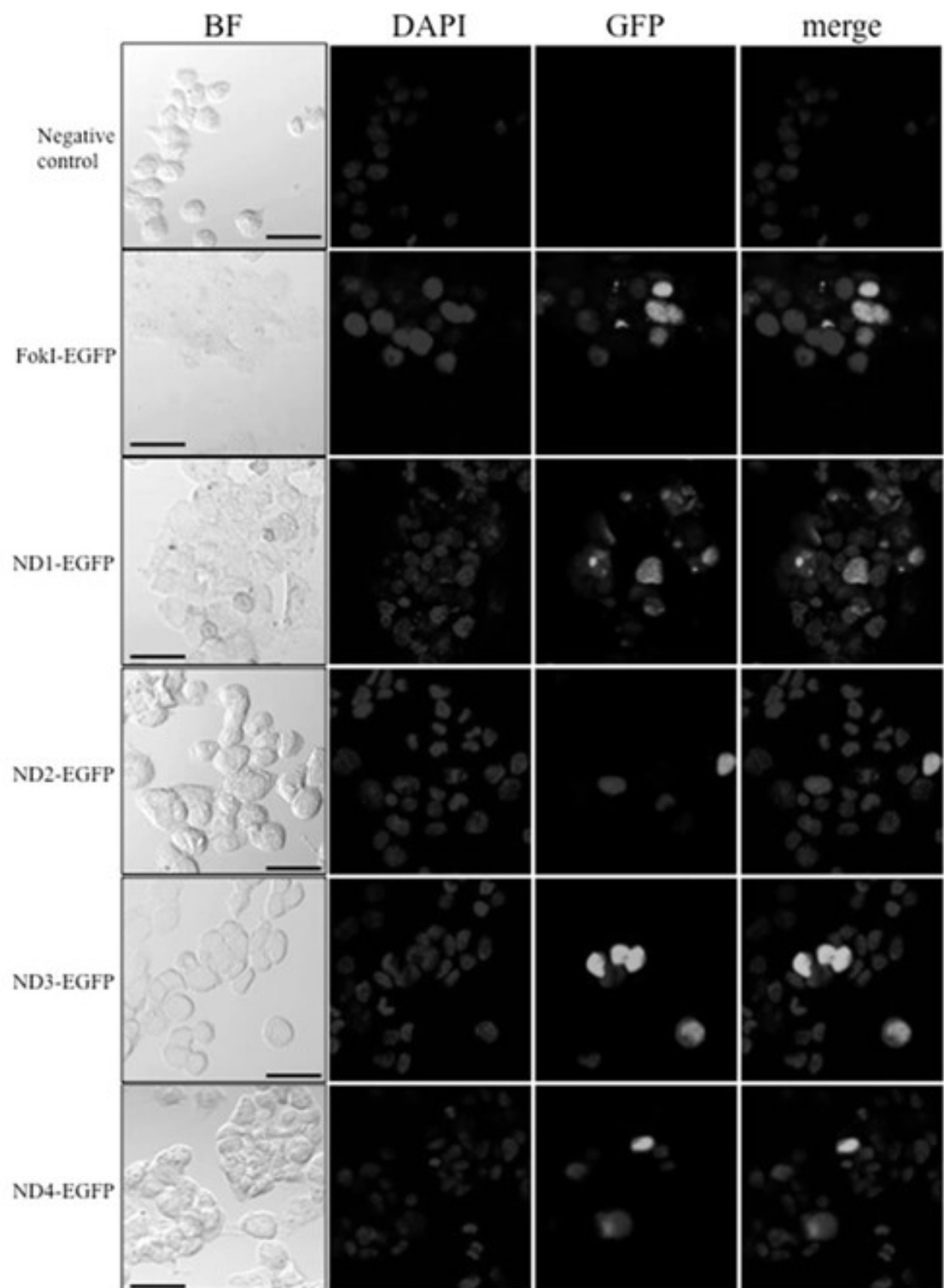


Fig.5

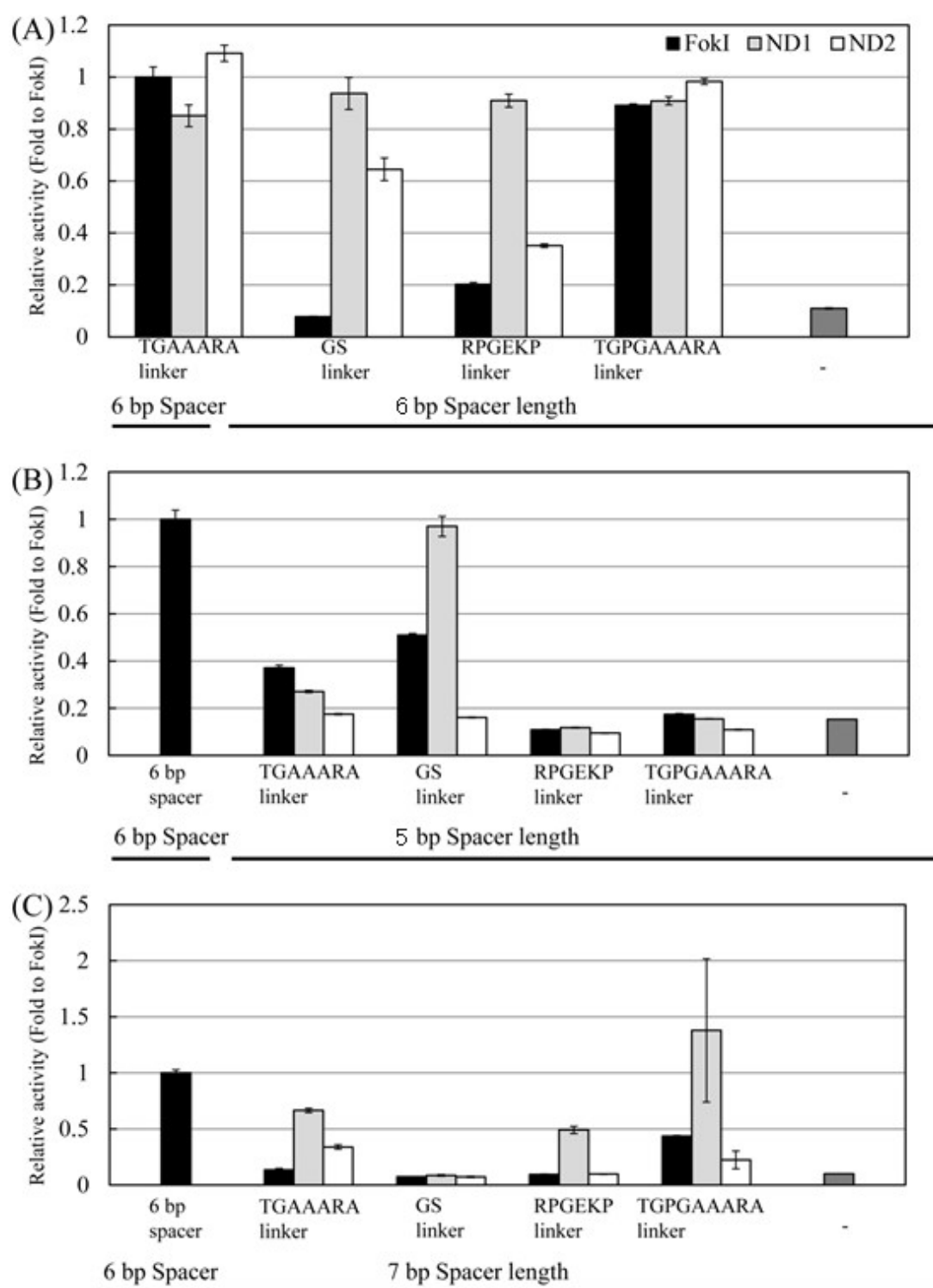


Fig.6

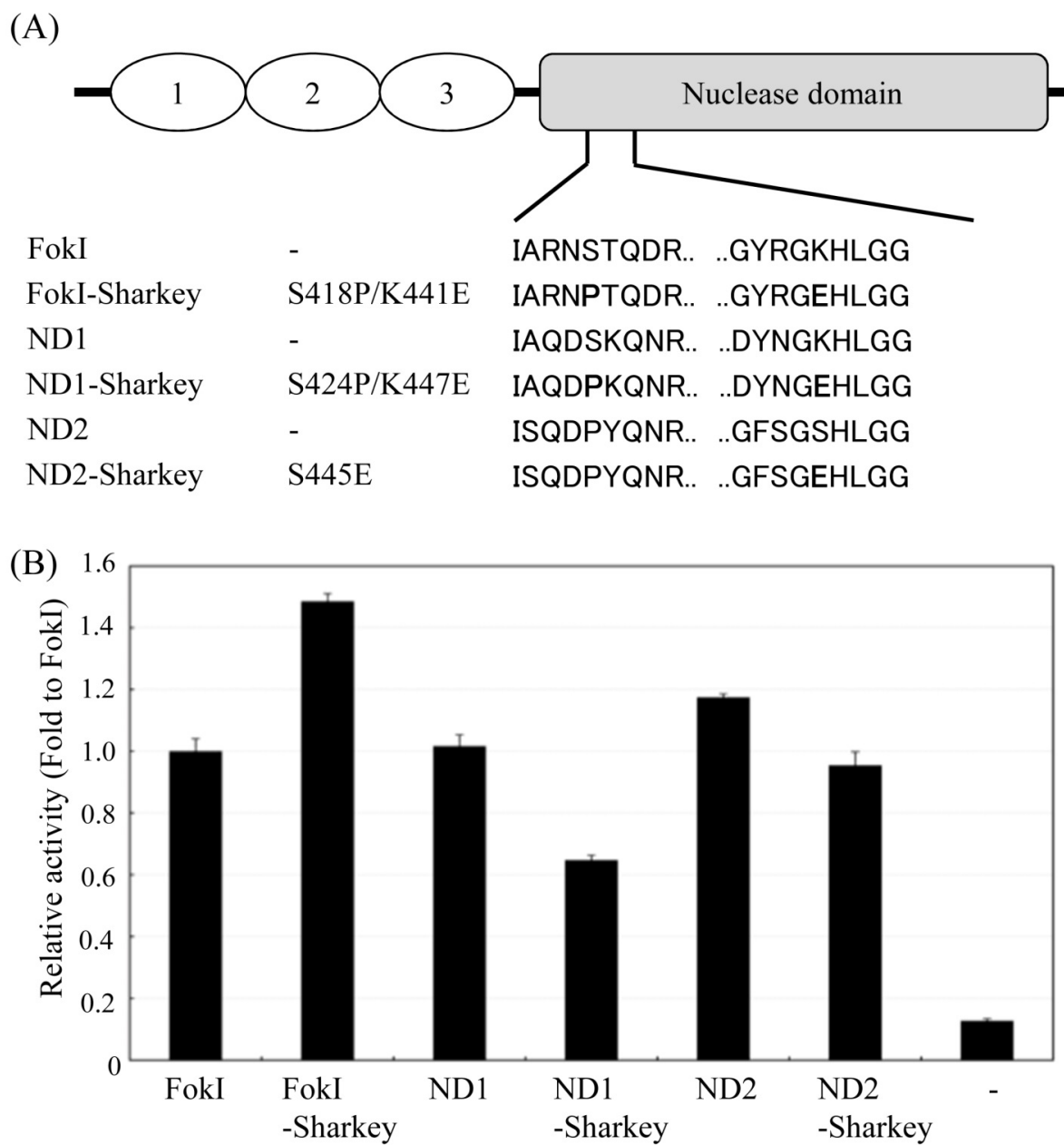


Fig.7

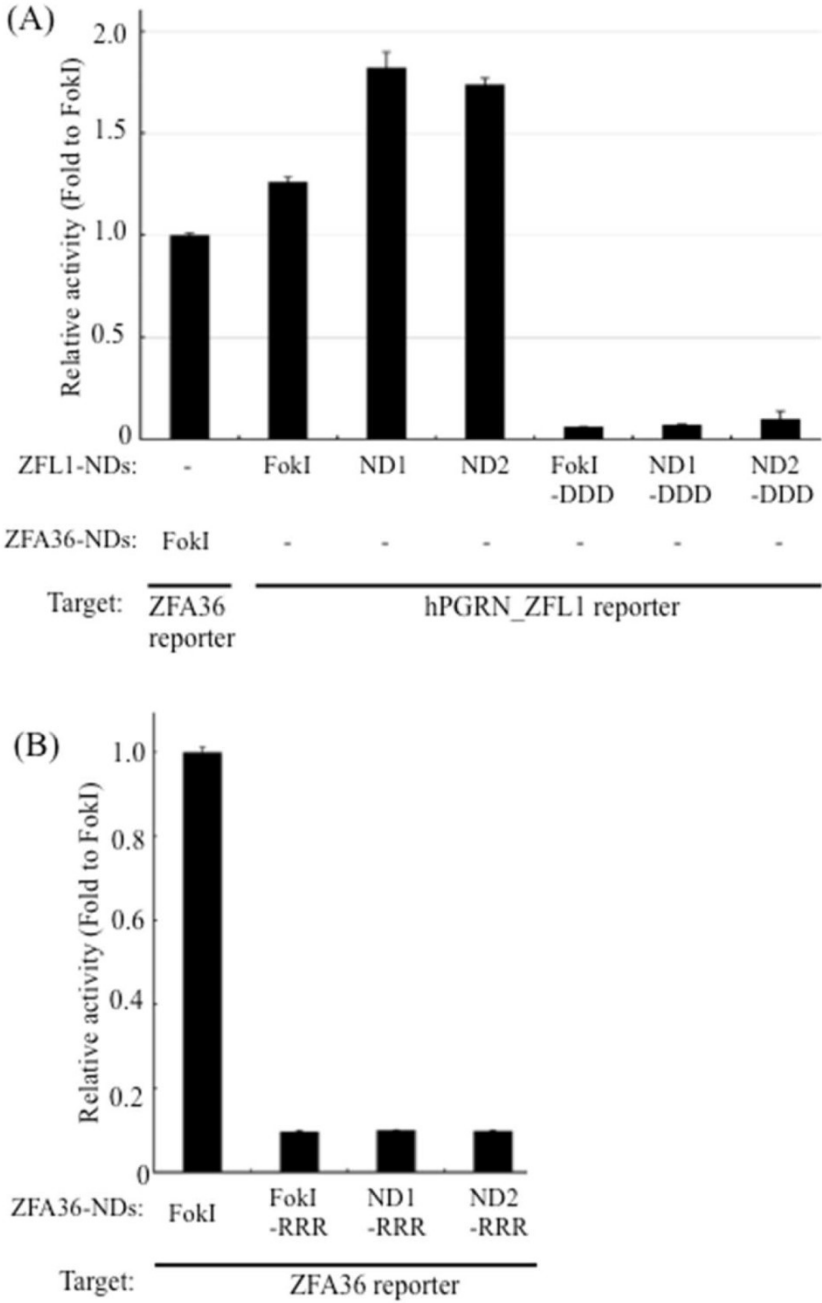


Fig.8A

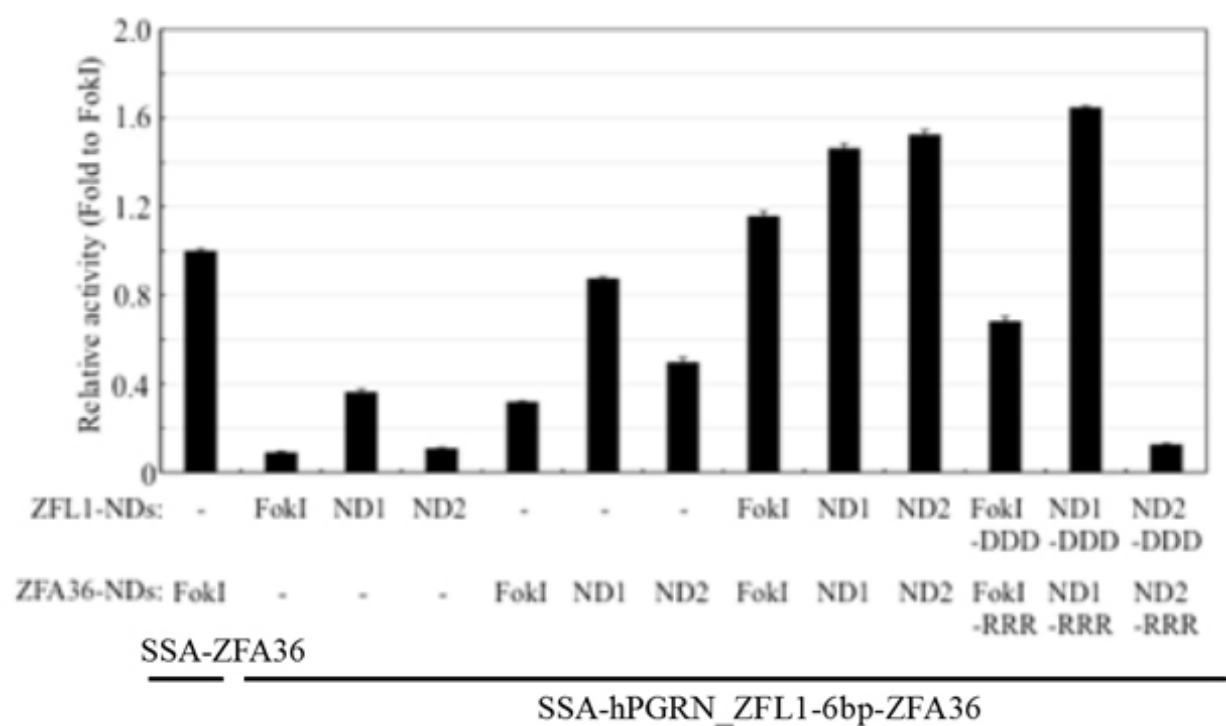


Fig.8B

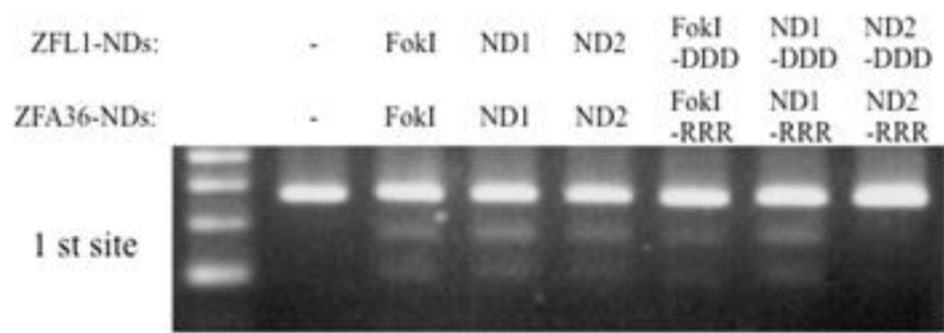


Fig.9

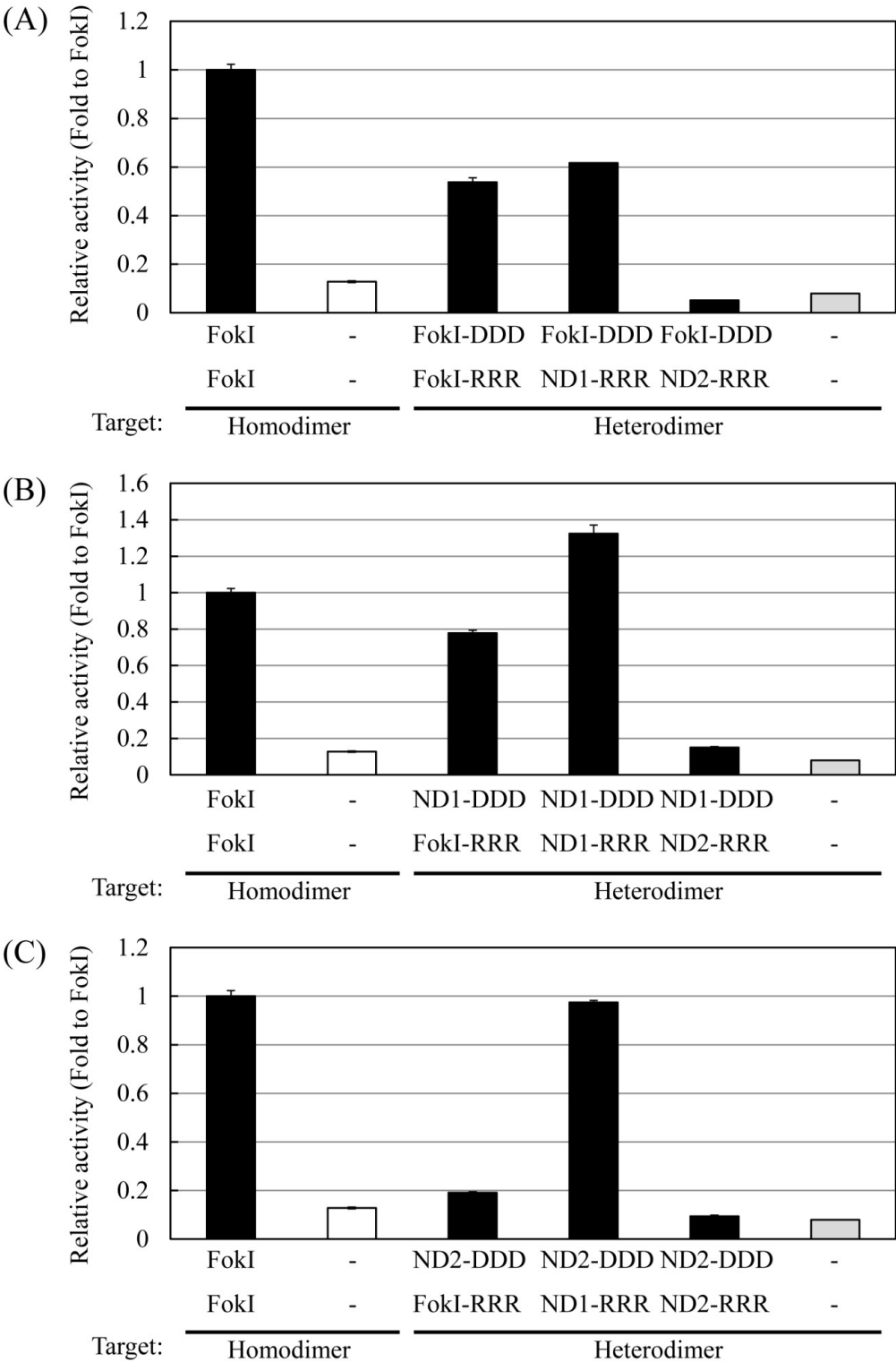


Fig.10

ZFA36-ZFA36 1st site		ZFA36-ZFA36 2nd site	
FokI (N=17)		FokI (N=20)	
(Reference)	ACCATCTTCC-----ACTCT-GAAGATGGA	(Reference)	ACCATCTTCAA-----GAGA--GAAGATGGC
wt 13/17	CAGCCACCATCTTCC-----ACTCT-GAAGATGGACAGGT	wt 13/20	ACCTTACCATCTTCAA-----GAGA--GAAGATGGCTTAAA
+1 1/17	CAGCCACCATCTTCC-----ACTCTGAAGATGGACAGGT	+2 1/20	ACCTTACCATCTTCAA-----GAGAGA--GAAGATGGCTTAAA
+4 3/17	CAGCCACCATCTTCCACTCTCTGAAAGATGGACAGGT	+4 3/20	ACCTTACCATCTTCAAGA-GAGAGA--GAAGATGGCTTAAA
		+5 1/20	ACCTTACCATCTTCAAGAGGAGAGA--GAAGATGGCTTAAA
		+232 1/20	ACCTTACCATCTTCAA(231bp)GAGTGAAGATGGCTTAAA
		Δ2 1/20	ACCTTACCATCTTCAA-----GA--GAAGATGGCTTAAA
ND1 (N=14)		ND1 (N=17)	
(Reference)	ACCATCTTCC-----ACTCTGAAGATGGA	(Reference)	ACCATCTTCAA-----GAGAGAAGATGGC
wt 3/14	CAGCCACCATCTTCC-----ACTCTGAAGATGGACAGGT	wt 4/17	ACCTTACCATCTTCAA-----GAGAGAAGATGGCTTAAA
+1 1/14	CAGCCACCATCTTCCA-----ACTCTGAAGATGGACAGGT	+2 6/17	ACCTTACCATCTTCAA--GAGAGAAGATGGCTTAAA
+2/Δ1 2/14	CAGCCACCATCTTCCACT--CTCTGAAGATGGACAGGT	+4 3/17	ACCTTACCATCTTCAAGAGAGAGAGAAGATGGCTTAAA
+4 6/14	CAGCCACCATCTTCCACTCACTCTGAAAGATGGACAGGT	Δ2 2/17	ACCTTACCATCTTCAA-----TAGAAGATGGCTTAAA
Δ2 1/14	CAGCCACCATCTTCC-----TCTGAAGATGGACAGGT	Δ4 2/17	ACCTTACCATCTTCAA-----AGAAGATGGCTTAAA
Δ8 1/14	CAGCC-----C-----ACTCTGAAGATGGACAGGT		
ND2 (N=13)		ND2 (N=16)	
(Reference)	ACCATCTTCCACTCT--GAAGATGGA	(Reference)	ACCATCTTCAA-----GAGAGAAGATGGC
wt 9/13	CAGCCACCATCTTCCACTCT--GAAGATGGACAGGT	wt 7/16	ACCTTACCATCTTCAA-----GAGAGAAGATGGCTTAAA
+1 1/13	CAGCCACCATCTTCCACTCT-TGAAGATGGACAGGT	+1 1/16	ACCTTACCATCTTCAA-----AGAGAAGATGGCTTAAA
+2 1/13	CAGCCACCATCTTCCACTCTCTGAAAGATGGACAGGT	+2 2/16	ACCTTACCATCTTCAA-----GAGAGAAGATGGCTTAAA
Δ2 1/13	CAGCCACCATCTTCC--TCT--GAAGATGGACAGGT	+4 5/16	ACCTTACCATCTTCAA-----GAGAGAAGATGGCTTAAA
Δ4 1/13	CAGCCACCATCTT-----TCT--GAAGATGGACAGGT	+71 1/16	ACCTTACCATCTTCAA(70bp)AGAGAAGATGGCTTAAA
ND3 (N=15)		ND3 (N=16)	
(Reference)	ACCATCTTCCACTCTGAAGATGGA	(Reference)	ACCATCTTCAA--GAGAGAAGATGGC
wt 15/15	CAGCCACCATCTTCCACTCTGAAGATGGACAGGT	wt 13/16	ACCTTACCATCTTCAA--GAGAGAAGATGGCTTAAA
		+2 1/16	ACCTTACCATCTTCAAGAGAGAGAGAAGATGGCTTAAA
		Δ2 1/16	ACCTTACCATCTTCAA-----GAGAAGATGGCTTAAA
		Δ8 1/16	ACCTTACCATCTTC-----AGTTGGCTTAAA
ND4 (N=16)		ND4 (N=14)	
(Reference)	ACCATCTTCCACTCTGAAGATGGA	(Reference)	ACCATCTTCAAGAGAAGATGGC
wt 16/16	CAGCCACCATCTTCCACTCTGAAGATGGACAGGT	wt 14/14	CAGCCACCATCTTCAAGAGAGAAGATGGCTTAAA

Fig.11A

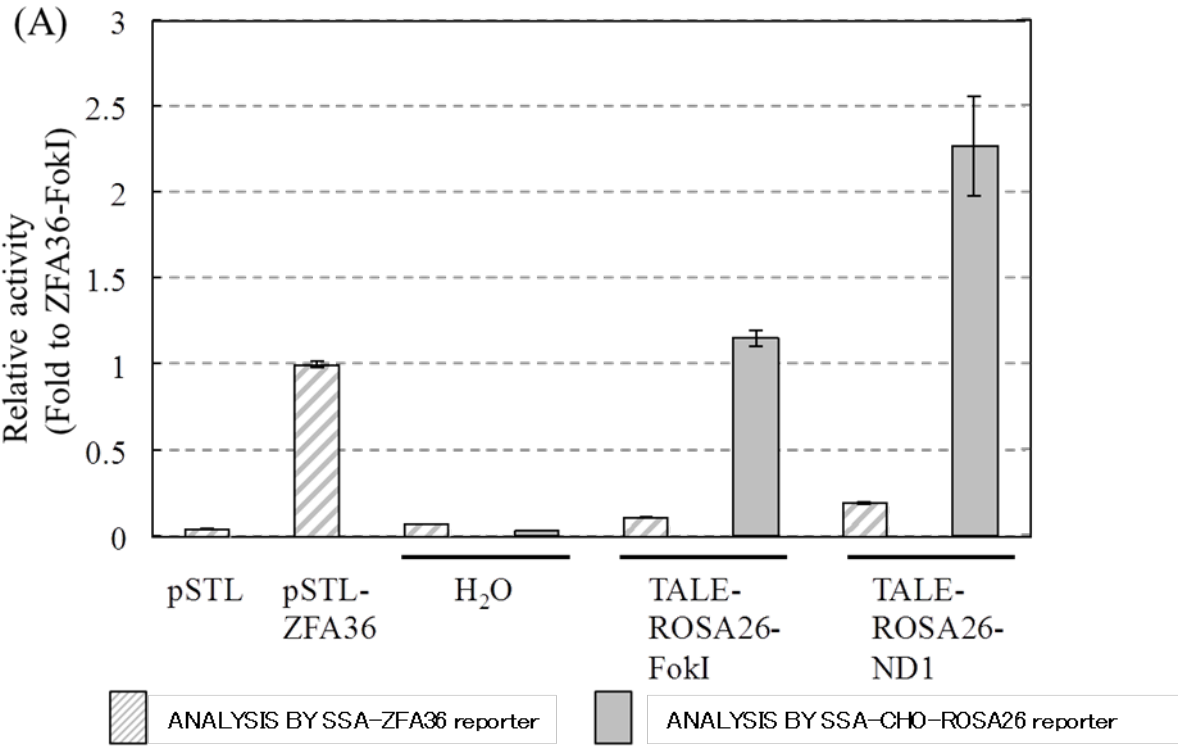


Fig.11B

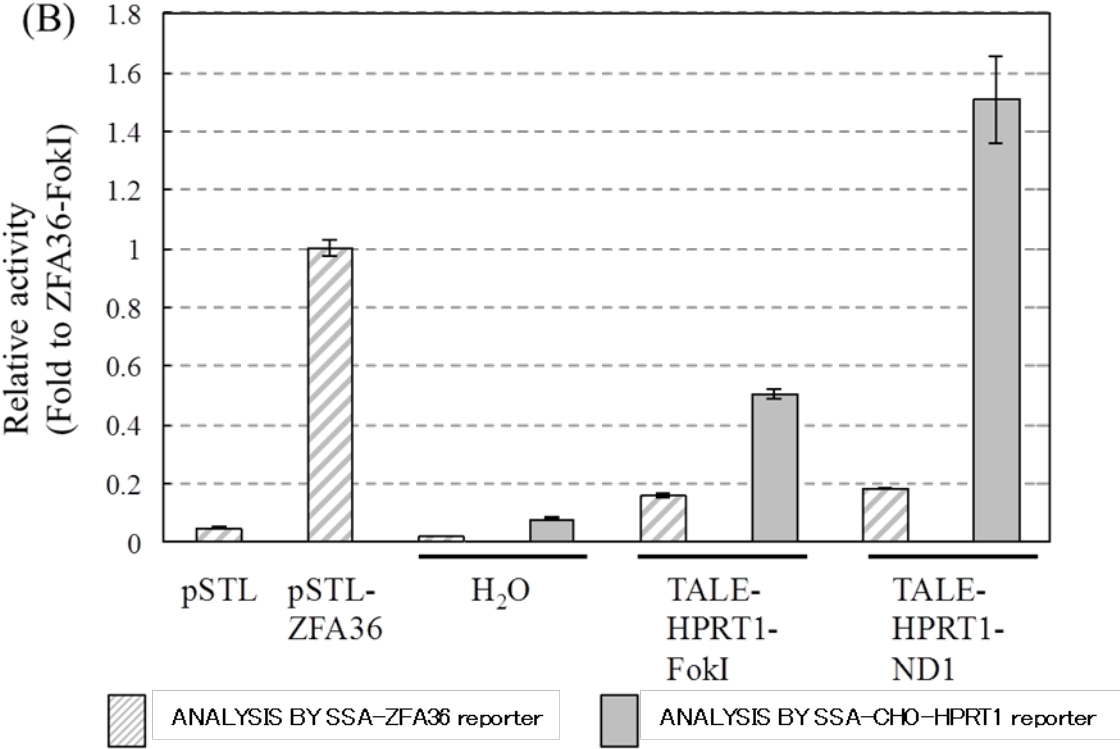


Fig.12A

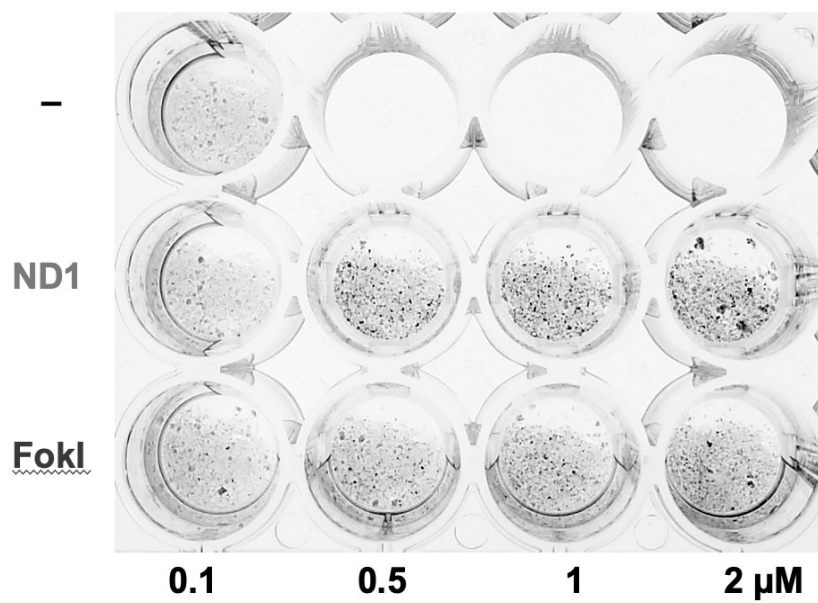


Fig.12B

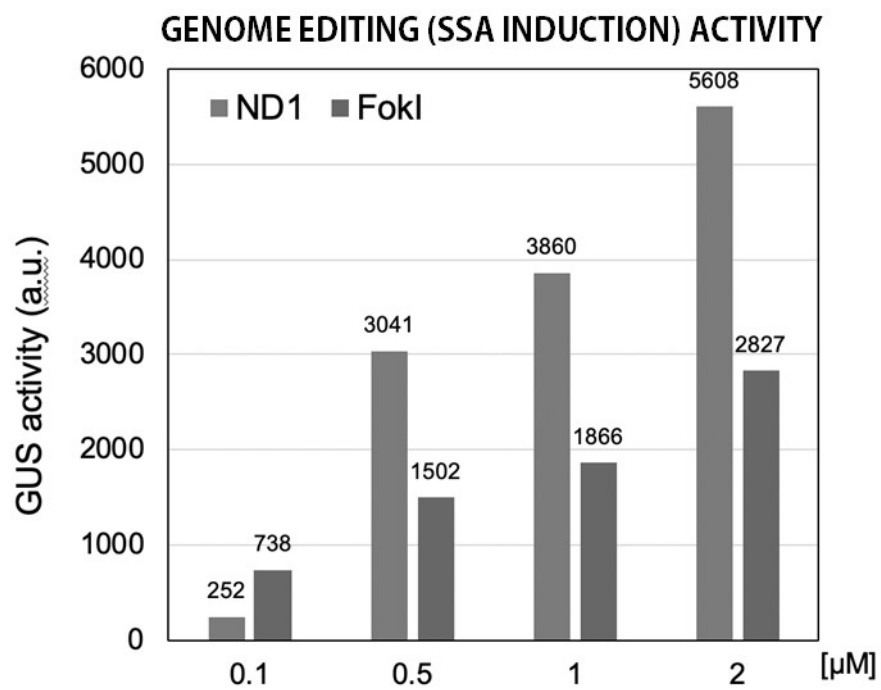


Fig.13

