

DDSAAADYCPPPKRLKTN--CYNNGKDRGEEDQSREOMALDVTNPKSLEDSCLSCGRKNPVSFHPLFEGGLCQTCRDRFLELFYMYDDDGYSYCTVCC 466
 IDFAASEYSTPPKRLKTN--SYG--GKDRGDEEESRERMASDVTNNGKLEDRCLSCGKKNPVSFHPLFEGGLCQSCRDRFLELFYMYDEEDGYQSYCTVCC 488
 NDSAASE-SPPPKRLKTN--SYG--GKDRGDEEESRERMASEVTNNGKLEDRCLSCGKKNPVSFHPLFEGGLCQSCRDRFLELFYMYDEEDGYQSYCTVCC 488
 EEVTVDLSLPPPKRLKPS--CVNNKKEEVEDQSREKMSDLKNNKSNPELSCIAAGRRNPPSFHPLFEGGLCHTCRDRFLELFYMYDDDGYSYCTVCC 386
 LESSPPEFP--SAKRARLP--LNKAKPGIEEVSREQMVNEVLKMHRSIEEFLCSCGKTRVATFHPLFEGGLCLTCKDAYLENSYMYDDDGYSYCTVCC 446

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GKELLCSNA--SCCRFCVCECLEVLVGRGSSAKAKEQEPWNCYMCQPORSYGVLRQXQDSSRLQDFFTSK--GEYDAPKIYPVPPAKRRRPIRVLSLFD 576
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 582
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 575
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 581
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 573
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 565
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 588
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 588
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 485
 GRELLCSNTSCCRFCVCECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDNVRLQAFFTSDT--GLEYEAPKLYPAIPAARRRPIRVLSLFD 545

DNA Methylase domain

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GIATGYLVKDLGIQVEKYIASEICEDPLAVGTVRHEGNIITYVH--DVRNITKRNIEEWGPFDLVIGGSPCNDLSLASPERKAPVGEAAWPHGAGSPQAA 674
 GIATGYLVKELGKIVGKYVASEVCEESIAVGTVKHEGNIKYV--DVRNITKRNIEEWGPFDLVIGGSPCNDLSNVNPAKGLY----- 665
 GIATGYLVKELGKIVGKYVASEVCEESIAVGTVKHEGNIKYV--DVRNITKRNIEEWGPFDLVIGGSPCNDLSNVNPAKGLY----- 658
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 GIATGYLVKELGKIVGKYVASEVCEESIAVGTVKHEGNIKYV--DVRNITKRNIEEWGPFDLVIGGSPCNDLSNVNPAKGLY----- 649
 GIATGYLVKDLGIQVEKYIASEICEDPLAVGTVRHEGNIITYVH--DVRNITKRNIEEWGPFDLVIGGSPCNDLSLASPERKAPVGEAAWPHGAGSPQAA 671
 GIATGYLVKELGKIVGKYVASEVCEESIAVGTVKHEGNIKYV--DVRNITKRNIEEWGPFDLVIGGSPCNDLSNVNPAKGLY----- 671
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WGRRRSCAVAPSGDTCQALSPGPPPEVPTPQPNLRGRGRSPNTPAGSPRTEGTGRLFFEFYHLLNYSRPKAGEEERPFWMFENVVAMRVNDKRDISR 774
 -----EGTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMKVGDKRDISR 713
 -----EGTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMKVGDKRDISR 906
 -----EGTGRLFFEFYHLLNYSRKEGDDRPFFWMFENVVAMQVGDKRDISR 712
 -----EGTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMKVGDKRDISR 704
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 -----EGTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMRVNDKRDISR 676

LECNPVMIDAIKISAAHRARYFWGNLPGMN-----RIFGFPV 811
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HCTDVSNSIRGARQKLLGRSWSIPVIOHLFSPLKDYFACE 851aa, chickenDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 853aa, humanDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 1046aa, chimpanzeeDNMT3B
 HYTDVSNMGRVARQKLPGRSWSVPVIRHLFAPLKDYFACE 852aa, pigDNMT3B
 HYTDVSNMGRVARQKLLGRSWSVPVIRHLFAPLKDYFACE 844aa, cattleDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 774aa, horseDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 859aa, ratDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 859aa, mouseDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 756aa, opossumDNMT3B
 HYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE 816aa, zebrafishDNMT3B