

Product datasheet for TP313064

DNMT3A (NM_022552) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human DNA (cytosine-5-)-methyltransferase 3 alpha (DNMT3A), transcript variant 3, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA	>RC213064 protein sequence
Clone or AA Sequence:	Red=Cloning site Green=Tags(s)

MPAMPSSGPGDTSSSSAEREEDRKDGEEQEPRGKEERQEPSTTARKVGRPGRKRKHPPVESGDTPKDPA
VISKSPSMAQDSGASELLPNGDLEKRSEPPQEEGSPAGGQKGGAPAEEGAAETLPEASRAVENGCCPTK
EGRGAPAEAGKEQKETNIESMKMEGSRGRLRGGLGWESSLRQRPMPRLTFQAGDPYYISKRKRDEWLARW
KREAEEKKAVIAGMNAVEENQGPGESQKVEEASPPAVQQPTDPASPTVATTPEPVGSDAGDKNATKAGDD
EPEYEDGRGFGIGELVWGKLRGFSWWPGRIVSWWMTGRSRAAEGTRWVMWFGDGKFSVVCVEKLMPLSSF
CSAFHQATYNKQPMYRKAIYEVLQVASSRAGKLFVCHDSDESDTAKAVEVQNKPMIEWALGGFQPSGPK
GLEPPEEEKNPYKEVYTDMMWVEPEAAAYAPPPAKKPRKSTAEKPKVKEIIDERTRERLVYEVQRKCRNI
EDICISCGLNVTLEHPLFVGGMCQNCKNCFLECAQYQDDDGYSYCTICCGGREVLNCGNNCCRCFCV
ECVDLLVGPAAQAIAKEDPWNCYMCGHKGTYGLLRREDWPSRLQMFFANNHDQEFDPKVPVPAEK
RKPIRVLSLFDGIATGLLVKDLGIQVDRIYASEVCEDESITVGMVRHQGKIMYVGDVRSVTQKHIQEWGP
FDLVIGGSPCNDLSIVNPARKGLYEGTGRLFFEFYRLLHDARPKEGDDRPFFWLFENVVAMGVSDKRDIS
RFLESNPVMIDAKEVSAHRARYFWGNLPGMNRPLASTVNDKLELQECLEHGRIAKFSKVRTITTRSNSI
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CV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

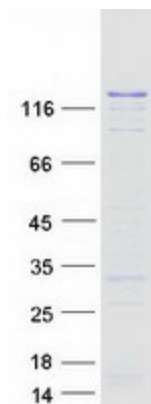
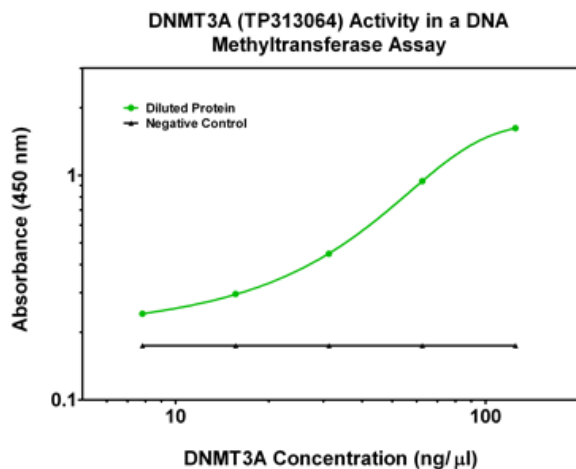
Tag:	C-Myc/DDK
Predicted MW:	101.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Bioactivity:	DNMT3A activity verified in a biochemical assay: DNMT3A (DNA (cytosine-5)-methyltransferase 3 alpha) (TP313064) is a DNA methyltransferase that is thought to function in de novo methylation, rather than maintenance methylation. It modifies DNA in a non-processive manner and also methylates non-CpG sites. Varying concentrations of DNMT3A were added to a microplate containing a bound methyltransferase substrate. After incubation, the resulting methylated DNA residues were detected immunologically and a colorimetric signal was generated and measured. Surface Plasmon Resonance (SPR) (PMID: 27468168)
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_072046
Locus ID:	1788
UniProt ID:	Q9Y6K1
RefSeq Size:	4324
Cytogenetics:	2p23.3
RefSeq ORF:	2736
Synonyms:	DNMT3A2; HESJAS; M.HsaIIIa; TBRS
Summary:	CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase that is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes to the cytoplasm and nucleus and its expression is developmentally regulated. [provided by RefSeq, Mar 2016]
Protein Families:	Druggable Genome
Protein Pathways:	Cysteine and methionine metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified DNMT3A protein (Cat# TP313064). The protein was produced from HEK293T cells transfected with DNMT3A cDNA clone (Cat# [RC213064]) using MegaTran 2.0 (Cat# [TT210002]).