

Product datasheet for TP508673

Cdyl (NM_001123386) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse chromodomain protein, Y chromosome-like (Cdyl), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR208673 protein sequence Red=Cloning site Green=Tags(s)

MASEELYEVESIVDKRKNKKGKTEYLVRWKGYSSEDDTWEPEQHLVNCEEYIHDFNRRHNERQKEGSLAR
ASRASPSNARKQISRSTHSTLSKTNKALVVGKDHESKSSQLLAASQKFRKNPAPSLANRKNMDLAKSGI
KILVPKSPVKGRTSVDGFQGESPEKLDPVDQGAEDTVAPEVTAEKPTGALLGPGAERARMGSRPRIHPLV
PQVSGPVTAAMATGLAVNGKGTSPFMDALAANGTVTIQTSVTGVTAGKRKFIDRRDQPFDKRLRFSVRQ
TESAYRYRDIVRKQDGFTHILLSTKSENNSLNPEVMKEVQSALSTAAADDSKLVLLSAVGSVFCCGLD
FIYFIRRLTDDRKRESTKMADAIRNFVNTFIQFKKPIIVAVNGPAIGLGASILPLCDVWANEKAWFQTP
YTFGQSPDGCSTVMFPKIMGGASANEMLFSGRKLTAQEACGKGLVSVQVFWPGTFTQEVMVRIKELASCN
PVVLEESKALVRCNMKMELEQANERECEVLKKIWGSAQGMDSMLKYLQRKIDEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	60.1 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
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 after receiving vials.
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_001116858

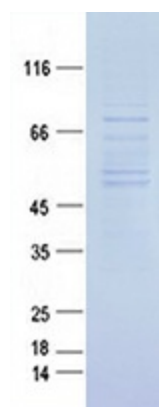


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Locus ID:	12593
UniProt ID:	Q9WTK2
RefSeq Size:	3494
Cytogenetics:	13 14.39 cM
RefSeq ORF:	1635
Synonyms:	AI325931

Summary: Isoform 2: Chromatin reader protein that recognizes and binds histone H3 trimethylated at 'Lys-9', dimethylated at 'Lys-27' and trimethylated at 'Lys-27' (H3K9me3, H3K27me2 and H3K27me3, respectively) (PubMed:12947414). Part of multimeric repressive chromatin complexes, where it is required for transmission and restoration of repressive histone marks, thereby preserving the epigenetic landscape (PubMed:12947414). Required for chromatin targeting and maximal enzymatic activity of Polycomb repressive complex 2 (PRC2); acts as a positive regulator of PRC2 activity by bridging the pre-existing histone H3K27me3 and newly recruited PRC2 on neighboring nucleosomes (By similarity). Acts as a corepressor for REST by facilitating histone-lysine N-methyltransferase EHMT2 recruitment and H3K9 dimethylation at REST target genes for repression (By similarity). Involved X chromosome inactivation in females: recruited to Xist RNA-coated X chromosome and facilitates propagation of H3K9me2 by anchoring EHMT2 (PubMed:24144980). Required for neuronal migration during brain development by repressing expression of RHOA (PubMed:28076783). In addition to act as a chromatin reader, acts as a hydro-lyase (By similarity). Shows crotonyl-coA hydratase activity by mediating the conversion of crotonyl-CoA ((2E)-butenoyl-CoA) to beta-hydroxybutyryl-CoA (3-hydroxybutanoyl-CoA), thereby acting as a negative regulator of histone crotonylation (By similarity). Histone crotonylation is required during spermatogenesis; down-regulation of histone crotonylation by CDYL regulates the reactivation of sex chromosome-linked genes in round spermatids and histone replacement in elongating spermatids (PubMed:28803779). May have histone acetyltransferase activity; such activity is however unsure in vivo (PubMed:12072557).[UniProtKB/Swiss-Prot Function]

Product images:



Purified recombinant protein Cdy1 was analyzed by SDS-PAGE gel and Coomassie Blue Staining.