

Product datasheet for **TP507291**

Mettl14 (NM_201638) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse methyltransferase like 14 (Mettl14), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR207291 representing NM_201638 Red =Cloning site Green =Tags(s) MDSRLQEIRERQKLRRQLLAQQLGAESADSIGAVLNSKDEQREIAETRETCRASDYDTSAPNSKRKCLDEG ETDEDKVEEYKDELEMQQEEENLPYEEIYKDSSTFLKGTQSLNPHNDYQCQHFVDTGHRPQNFIQVGLA DRFEEYPKLRELIRLKDDELIAKSNTPPMYLQADIEAFDIRELTPKFDVILPEPPEEYRETGITANEKC WTWDDIMKLEIDEIAAPRSFIFLWCGSGEGLDLGRVCLRWGYRRCEDICWIKTNKNNPGKTKLDPKAV FQRTKEHCLMGIKGTVKRSTGDGFIHANVDIDLIIITEEPEIGNIEKPVEIFHIIHFCLGRRRLHLFGRD STIRPGWLTVGPTLTNSNYAETYASYFSAPNSYLTGCTEEIERLPKSPPPKSKSDRGGGAPRGGGRGG TSAGRGRERNRSNFRGERGGFRGGGRGGTHRGGFTPR TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	52.6 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:	<u>NP_964000</u>
Locus ID:	210529



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UniProt ID: [Q3UIK4](#)

RefSeq Size: 2625

Cytogenetics: 3 G1

RefSeq ORF: 1368

Synonyms: G430022H21Rik; mKIAA1627

Summary: The METTL3-METTL14 heterodimer forms a N6-methyltransferase complex that methylates adenosine residues at the N(6) position of some mRNAs and regulates the circadian clock, differentiation of embryonic stem cells and cortical neurogenesis (PubMed:24394384, PubMed:28965759). In the heterodimer formed with METTL3, METTL14 constitutes the RNA-binding scaffold that recognizes the substrate rather than the catalytic core (By similarity). N6-methyladenosine (m6A), which takes place at the 5'-[AG]GAC-3' consensus sites of some mRNAs, plays a role in mRNA stability and processing (By similarity). M6A acts as a key regulator of mRNA stability by promoting mRNA destabilization and degradation (PubMed:24394384). In embryonic stem cells (ESCs), m6A methylation of mRNAs encoding key naive pluripotency-promoting transcripts results in transcript destabilization (PubMed:24394384). M6A regulates spermatogonial differentiation and meiosis and is essential for male fertility and spermatogenesis (PubMed:28914256). M6A also regulates cortical neurogenesis: m6A methylation of transcripts related to transcription factors, neural stem cells, the cell cycle and neuronal differentiation during brain development promotes their destabilization and decay, promoting differentiation of radial glial cells (PubMed:28965759).[UniProtKB/Swiss-Prot Function]