

## Product datasheet for TP511714

### Adar (NM\_019655) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse adenosine deaminase, RNA-specific (Adar), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211714 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MSQGFRGPTGVFPHQTSYSDPSHEHSKWRYLQPQGPESYPRSFQLQQIEFLKGRLEAPLIGIQTQSLP  
PFLPGHWPRFPGPPAQDRQLEIWEFPRSVTLRNQGFHIGPPLPPPHSRGPPWRGADGLCSHFRELSISQS  
PEQKVLNRLEELGEGKATTAHVLAELRIPKRDIRILYSLEKKGKLRGRGKPLWSLVPLSQAWTQPP  
GVVNPDISCIQEFPRGEPGLDSEDGDPASDLEGPSEPLDMAEIKEKICDYLFNVSNSSALNLAKNIGLTKA  
RDVTSVLIDLERQGDVYRQGATPPIWYLTDKKRERLQMKRSTHSAPAPTLTAVPEATRSPSPACHPPPA  
GASSVAASKRVENGQEPAIKHESRHEARPGMRLRPHAYHNGPSRAGYVAENGQWATDDIPDNLNSIH  
TAPGEFRAIMEMPSFYSPTLPRCSPYKLTCEQLKNPVSGLLEYAQFTSQTCDFNLEIQSGPSHEPRFKF  
QVINGREFPPAEAGSKKQDAAVKAMAILLREAKAKDSGQPEDLSHCPMEEDSEKPAEAQAPSSSAT  
SLFSGKSPVTTLLECMHKLGNSEFRLLSKEGPAHDPKFYCVAVGAQTFPPVSAPSKKQMAAEEAM  
KALQEEAASSADDQSGGANTDSLDESMAPNKIRRIGELVRYLNTNPVGGLEYARSHGFAAEFKLIDQSG  
PPHEPKFVYQAKVGGRWFPVCAHSSKQKQDAADAALRVLIGESEKAEQLGFAELPLSGSTFHDQIAML  
SHRCFNALTNFQPSLLGRKILAAIIMKRDPEDMGVVSLGTGNRCVKGDSLSLKGETVNDCHAEIISRR  
GFIRFLYSELMKYNHHTAKNSIFELARGGEKLQIKKTVSFHLYISTAPCGDGFALFDKSCSDRAVESTESR  
HYPVFENPKQKGLRRTKVENGEGTIPVESSDIVPTWDGIRLGERLRTMSCSDKILRWNVLGLQGALLTHFL  
QPVYLKSVTLGYLFSQGHLETRAIACCRVTRDGKAFEDGLRYPFIVNHPKVGSRVSVYDSKRQSGKTKETS  
VNWCMADGYDLEILDGTRGTVDGPGKELSRVSKKNIFLQFKKLCSEFRARRDLLQLSYGEAKKAARDYDLAKN  
YFKKSLRDMGYGNWISKPQEEKNFYLCVPVND

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-MYC/DDK
Predicted MW:	127.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining



[View online »](#)

<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_062629</a>
<b>Locus ID:</b>	56417
<b>UniProt ID:</b>	<a href="#">Q99MU3</a> , <a href="#">Q3UH31</a>
<b>RefSeq Size:</b>	5850
<b>Cytogenetics:</b>	3 F1
<b>RefSeq ORF:</b>	3459
<b>Synonyms:</b>	Adar1; Adar1p110; Adar1p150; AV242451; mZaADAR
<b>Summary:</b>	Catalyzes the hydrolytic deamination of adenosine to inosine in double-stranded RNA (dsRNA) referred to as A-to-I RNA editing. This may affect gene expression and function in a number of ways that include mRNA translation by changing codons and hence the amino acid sequence of proteins; pre-mRNA splicing by altering splice site recognition sequences; RNA stability by changing sequences involved in nuclease recognition; genetic stability in the case of RNA virus genomes by changing sequences during viral RNA replication; and RNA structure-dependent activities such as microRNA production or targeting or protein-RNA interactions. Can edit both viral and cellular RNAs and can edit RNAs at multiple sites (hyper-editing) or at specific sites (site-specific editing). Its cellular RNA substrates include: bladder cancer-associated protein (BLCAP), neurotransmitter receptors for glutamate (GRIA2) and serotonin (HTR2C) and GABA receptor (GABRA3). Site-specific RNA editing of transcripts encoding these proteins results in amino acid substitutions which consequently alters their functional activities. Exhibits low-level editing at the GRIA2 Q/R site, but edits efficiently at the R/G site and HOTSPOT1. Does not affect polyomavirus replication but provides protection against virus-induced cytopathic effects. Essential for embryonic development and cell survival and plays a critical role in the maintenance of hematopoietic stem cells.[UniProtKB/Swiss-Prot Function]