

Product datasheet for TP511714

OriGene Technologies, Inc.

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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 >MR211714 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSQGFRGPTGVFPHQTQSYSDPSHEHSKWRYLQPQGPESYPRSFQLQQIEFLKGRLPEAPLIGIQTQSLP PFLPGHWPRFPGPPAQDRQLEIWEFPRSVTLRNQGFHIGPPLPPPHSRGPPWRGADGLCSHFRELSISQS PEQKVLNRLEELGEGKATTAHVLARELRIPKRDINRILYSLEKKGKLHRGRGKPPLWSLVPLSQAWTQPP GVVNPDSCIQEFPRGEPGLDSEDGDPASDLEGPSEPLDMAEIKEKICDYLFNVSNSSALNLAKNIGLTKA RDVTSVLIDLERQGDVYRQGATPPIWYLTDKKRERLQMKRSTHSAPAPTLTAVPEATRSPSFPACHPPPA GASSSVAASKRVENGQEPAIKHESRHEARPGPMRLRPHAYHNGPSRAGYVASENGQWATDDIPDNLNSI

TAPGEFRAIMEMPSFYSPTLPRCSPYKKLTECQLKNPVSGLLEYAQFTSQTCDFNLIEQSGPSHEPRFKF QVVINGREFPPAEAGSKKVAKQDAAVKAMAILLREAKAKDSGQPEDLSHCPMEEDSEKPAEAQAPSSSAT SLFSGKSPVTTLLECMHKLGNSCEFRLLSKEGPAHDPKFQYCVAVGAQTFPPVSAPSKKVAKQMAAEEAM KALQEEAASSADDQSGGANTDSLDESMAPNKIRRIGELVRYLNTNPVGGLLEYARSHGFAAEFKLIDQSG PPHEPKFVYQAKVGGRWFPAVCAHSKKQGKQDAADAALRVLIGESEKAEQLGFAELPLSGSTFHDQIAML SHRCFNALTNSFQPSLLGRKILAAIIMKRDPEDMGVVVSLGTGNRCVKGDSLSLKGETVNDCHAEIISRR GFIRFLYSELMKYNHHTAKNSIFELARGGEKLQIKKTVSFHLYISTAPCGDGALFDKSCSDRAVESTESR HYPVFENPKQGKLRTKVENGEGTIPVESSDIVPTWDGIRLGERLRTMSCSDKILRWNVLGLQGALLTHFL QPVYLKSVTLGYLFSQGHLTRAICCRVTRDGKAFEDGLRYPFIVNHPKVGRVSVYDSKRQSGKTKETSVN WCMADGYDLEILDGTRGTVDGPGKELSRVSKKNIFLQFKKLCSFRARRDLLQLSYGEAKKAARDYDLAKN YFKKSLRDMGYGNWISKPQEEKNFYLCPVPND

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK
Predicted MW: 127.7 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method





Adar (NM_019655) Mouse Recombinant Protein - TP511714

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 062629

 Locus ID:
 56417

 UniProt ID:
 Q99MU3

 RefSeq Size:
 5850

 Cytogenetics:
 3 F1

 RefSeq ORF:
 3456

Synonyms: Adar1; Adar1p110; Adar1p150; AV242451; mZaADAR

Summary: 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 (hyperediting) 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]