

Recombinant Mouse OAS3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51814

Size: 10ug, 100ug

Protein Name: 2'-5'-oligoadenylate synthase 3 ((2-5')oligo(A) synthase 3) (2-5A synthase 3) (EC 2.7.7.84) (2',5'-oligoadenylate synthetase-like 10)

Synonym: Oas3, oasl10

UniProt ID: Q8VI93

UniProt Link: www.uniprot.org/uniprotkb/Q8VI93/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1138 AA

Molecular Weight: 126 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDLFHTPAGALDKLVAHNLHPAPEFTAAVRGALGSLNITLQQHRARGSQRPVRIRIAKGGAYARGTA
LRGGTDVELVIFLDCFQSFQDQKTCHSETLGAMRMLLESWGGHPGPGLTFEFSQSKASRILQFRLA
SADGEHWIDVSLVPAFDVLGQPRSGVKPTPNVYSSLLSSHCQAGEYSACFTEPRKNFVNTRPAKLK
NLILLVKHWYHQVQTRAVRATLPPSYALELLTIFAWEQGCGKDSFSLAQGLRTVLALIQHSKYLCIFW
TENYGFEDPAVGFEFLRRQLKRPRPVILDPADPTWDVGNGTAWRWDVLAQEAESSFSQQCFKQASG
VLVQPWEGPGLPRAGILDLGHPIYQGPNQALEDNKGHLAVQSKERSQKPSNSAPGFPEAATKIPAM
PNPSANKTRKIRKKAHPKTVQEAALDSISSHVRIQTSTASSHMPPDRSSISTAGSRMSPDLSQIPSK
DLDCFIQDHLRSPSPQFQQQVKQAIDAILCCLREKSVYKVLRVSKGGSFGRGTDLRGSCDVELVIFYKT
LGDFKGQKPHQAEILRDMQAQLRHWQCNPVPGLSLQFIEQKPNALQLQLASTDLSNRVDLSVLPF
DAVGPLKSGTKPQPQVYSSLLSSGCQAGEHAACFAELRRNFINTCPPKLKSLMLLVKHWYRQVVTR
YKGGEAAGDAPPPAYALELLTIFAWEQGCGEQKFSLAEGLRTILRLIQHQSLCIYWTVNYSVQDPAI
RAHLLCQLRKARPLVLDPADPTWNVGQGDWKL LAQEAALGSQVCLQSGDGTLPVPWDVTPALLH
QTLAEDLDKFISEFLQPNRHFLTQVKRAVDTCISFLKENCFRNSTIKVLKVVKGGSSAKGTALQGRSD
ADLVVFLSCFRQFSEQGSHRAEIISEIQAHL EACQQMHSFDVKFEVSKRKNPRVLSFTLTQSQTLLDQS
VDFDVLPAFDALGQLRSGSRPDPRVYTDLIHSCSNAGEFSTCFTELQRDFITSRPTKLKSLIRLVKYW
YQQCNKTIKGKGSPPQHGLELLTVYAWEQGGQNPQFNMAEGFRTVLELIVQYRQLCVYWTINYS
EDKTIGDFLKMQLRKPRPVILDPADPTGNLGHNARWDLLAKEATVYASALCCVDRDGNPIKPWPVKA
AV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant 2'-5'-oligoadenylate synthase 3 ((2-5')oligo(A) synthase 3) (2-5A synthase 3) (EC 2.7.7.84) (2',5'-oligoadenylate synthetase-like 10) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response. In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation. Catalyzes the formation of 2'-5'-oligoadenylates (2-5A) from polymerization of ATP which then bind to the inactive monomeric form of ribonuclease L (RNase L) leading to its dimerization and subsequent activation. Activation of RNase L leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication. Can mediate the antiviral effect via the classical RNase L-dependent pathway or an alternative antiviral pathway independent of RNase L.

Subcellular Localization: Cytoplasm . Nucleus .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.