

Product datasheet for TP508559

OriGene Technologies, Inc.

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Pde9a (NM_008804) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse phosphodiesterase 9A (Pde9a), with C-terminal

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR208559 representing NM 008804

Clone or AA Sequence: Red=Cloning site Green=Tags(s)

MGAGSSSYRPKAIYLDIDGRIQKVVFSKYCNSSDIMDLFCIATGLPRNTTISLLTTDDAMVSIDPTMPAN
SERTPYKVRPVAVKQVSEREELIQGVLAQVAEQFSRAFKINELKAEVANHLAVLEKRVELEGLKVVEIEK
CKSDIKKMREELAARNSRTNCPCKYSFLDNKKLTPRRDVPTYPKYLLSPETIEALRKPTFDVWLWEPNEM
LSCLEHMYHDLGLVRDFSINPITLRRWLLCVHDNYRNNPFHNFRHCFCVTQMMYSMVWLCGLQEKFSQMD
ILVLMTAAICHDLDHPGYNNTYQINARTELAVRYNDISPLENHHCAIAFQILARPECNIFASVPPEGFRQ

IRQGMITLILATDMARHAEIMDSFKEKMENFDYSNEEHLTLLKMILIKCCDISNEVRPMEVAEPWVDCLL EEYFMQSDREKSEGLPVAPFMDRDKVTKATAQIGFIKFVLIPMFETVTKLFPVVEETMLRPLWESREHYE

 ${\tt ELKQLDDAMKELQKKTESLTSGAPENTTEKNRDAKDSEGHSPPN}$

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 61.6 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.

RefSeg: NP 032830





Pde9a (NM_008804) Mouse Recombinant Protein - TP508559

Locus ID: 18585

UniProt ID: <u>070628</u>, <u>Q8BSU4</u>

RefSeq Size: 2064
Cytogenetics: 17 B1
RefSeq ORF: 1602
Synonyms: PDE9A1

Summary: Specifically hydrolyzes the second messenger cGMP, which is a key regulator of many important

physiological processes (PubMed:9624145). Highly specific: compared to other members of the cyclic nucleotide phosphodiesterase family, has the highest affinity and selectivity for cGMP. Specifically regulates natriuretic-peptide-dependent cGMP signaling in heart, acting as a regulator of cardiac hypertrophy in myocytes and muscle. Does not regulate nitric oxide-dependent cGMP in heart (PubMed:25799991). Additional experiments are required to confirm whether its ability to hydrolyze natriuretic-peptide-dependent cGMP is specific to heart or is a general feature of the protein (Probable). In brain, involved in cognitive function, such as learning and long-term memory (PubMed:22328573, PubMed:24746365).[UniProtKB/Swiss-Prot

Function]