

High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A

Catalog No: #AP78863

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Package Size: #AP78863-1 50ug #AP78863-2 100ug #AP78863-3 1mg

Description

Product Name	High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% by SDS-PAGE
Species Reactivity	Human
Immunogen Description	Recombinant protein
Other Names	null
Accession No.	O76083Gene name:PDE9A
Uniprot	O76083
GeneID	5152;
Tag Info	His
Formulation	50mM NaH ₂ PO ₄ , 500mM NaCl Buffer with 500mM Imidazole,10%glycerol(PH8.0)
Storage	Store at -20C. (Avoid repeated freezing and thawing.)Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Specifically hydrolyzes the second messenger cGMP, which is a key regulator of many important physiological processes. Highly specific: compared to other members of the cyclic nucleotide phosphodiesterase family, has the highest affinity and selectivity for cGMP (PubMed:9624146, PubMed:18757755, PubMed:21483814). 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.

References

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Note: This product is for in vitro research use only