

## PDE9A active protein

PDE9A, Active

CATALOG #  
**AAA73107**

HOST  
**Sf9 cells**

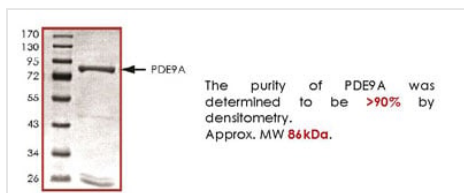
### PRODUCT SYNONYMS

PDE9A; Active; PDE9A active protein

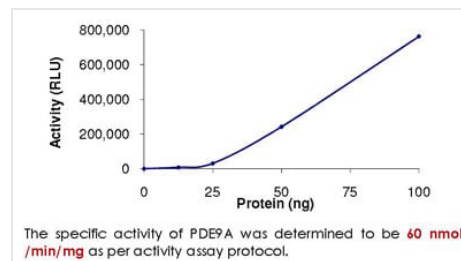
### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | Sf9 cells                                                                                                                                                                                                                                                                 |
| Purity/Purification     | >90%                                                                                                                                                                                                                                                                      |
| Form/Format             | 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.                                                                                                                                                                    |
| Concentration           | 0.1 ug/ml (varies by lot)                                                                                                                                                                                                                                                 |
| Specific Activity       | 60 nmol/min/mg                                                                                                                                                                                                                                                            |
| Dry Ice Note            | The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.                                                                                                                                                                        |
| Preparation and Storage | Shipping: Dry Ice<br>Store product at -70 degree C.<br>For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature.<br>For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. |

### IMAGES



Purity Info



Specific Activity

### ADDITIONAL INFORMATION

#### Related Product Information for PDE9A active protein

Description: Full-length recombinant human PDE9A was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.

Scientific Background: PDE9A is a member of the phosphodiesterase (PDE) family that catalyzes the hydrolysis of cGMP to the monophosphate and thus plays an important role in signal transduction by regulating the intracellular concentration of cyclic nucleotides (1). Multiple transcript variants encoding several different isoforms have been found for PDE9A (2). These mRNAs differ in the use of specific combinations of exons located at the 5' end of the gene while the 3' half, encoding the catalytic domain of the protein, always has the same combination of exons. PDE9A has been used in the study of gene- disease association, gene-environment interaction, and pharmacogenomic/toxicogenomic. PDE9A is mainly expressed in spleen, small intestine, and brain.

#### Product Categories/Family for PDE9A active protein

**Enzymes; Active Phosphodiesterases**

|            |                                                                                                                                                                                                                                                                                                                       |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| References | 1. Fisher, D A. et al: Isolation and characterization of PDE9A, a novel human cGMP-specific phosphodiesterase. J. Biol. Chem. 273: 15559-15564, 1998. 2. Soderling, S H. et al: Identification and characterization of a novel family of cyclic nucleotide phosphodiesterases. J. Biol. Chem. 273: 15553-15558, 1998. |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| NCBI GI #                        | 48762717                                                              |
| NCBI GeneID                      | 5152                                                                  |
| NCBI Accession #                 | NM_001001567.1                                                        |
| NCBI GenBank Nucleotide #        | NM_001001567                                                          |
| Molecular Weight                 | ~86 kDa                                                               |
| NCBI Official Full Name          | Homo sapiens phosphodiesterase 9A (PDE9A), transcript variant 2, mRNA |
| NCBI Official Synonym Full Names | phosphodiesterase 9A                                                  |
| NCBI Official Symbol             | PDE9A                                                                 |
| NCBI Official Synonym Symbols    | HSPDE9A2                                                              |
| NCBI Protein Information         | high affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A         |
| UniProt Protein Name             | High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A         |
| UniProt Gene Name                | PDE9A                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/sf9-cells-active-protein/pde9a/73107>