

Recombinant Human PDE3A Protein (His & GST tag)

Cat.NO.: TP06956

3th Edition

Synonyms:CGI-PDE;CGI-PDE-A;CGI-PDEA

Description:PDE3A belongs to the phosphodiesterase family. Phosphodiesterases (PDEs) are a family of related phosphohydrolyases that selectively catalyze the hydrolysis of 3' cyclic phosphate bonds in adenosine and/or guanine 3',5' cyclic monophosphate (cAMP and/or cGMP). They regulate the cellular levels, localization and duration of action of these second messengers by controlling the rate of their degradation. PDEs are expressed ubiquitously, with each subtype having a specific tissue distribution. These enzymes are involved in many signal transduction pathways and their functions include vascular smooth muscle proliferation and contraction, cardiac contractility, platelet aggregation, hormone secretion, immune cell activation, and they are involved in learning and memory. PDE3A has high affinity for both cAMP and cGMP and shows competitive inhibition of the cAMP hydrolytic activity by cGMP. It plays a critical role in regulating intracellular levels of cAMP and cGMP.

Form:PBS

Molecular Weight:81.7 kDa

Sequences:Lys669-Gln1141

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.