



Recombinant Protein Technical Manual

Recombinant Human PDE2A/CGS-PDE Protein (aa 215-900, His Tag)

RPES1535

Product Data:

Product SKU: RPES1535

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: O00408

Protein Information:

Molecular Mass: 80.0 kDa

AP Molecular Mass: 66 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CGS-PDE;CGSPDE;PDE2A1;PED2A4

Immunogen Information:

Sequence: Glu 215-His 900

Background:

cGMP-dependent 3',5'-cyclic phosphodiesterase, also known as cyclic GMP-stimulated phosphodiesterase and PDE2A, is a peripheral membrane protein which belongs to the cyclic nucleotide phosphodiesterase family and PDE2 subfamily. Phosphodiesterases (PDEs) comprise a family of enzymes that regulate the levels of cyclic nucleotides, key second messengers that mediate a diverse array of functions. Phosphodiesterases (PDEs) modulate signaling by cyclic nucleotides in diverse processes such as cardiac contractility, platelet aggregation, lipolysis, glycogenolysis, and smooth muscle contraction. PDE2A is an evolutionarily conserved cGMP-stimulated cAMP and cGMP PDE. PDE2A contains two GAF domains. PDE2A is expressed in brain and to a lesser extent in heart, placenta, lung, skeletal muscle, kidney and pancreas. PDE2A is a cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. PDE2A is involved in the regulation of blood pressure and fluid homeostasis by the atrial natriuretic peptide (ANP), making PDE2-type enzymes important targets for drug discovery.