Recombinant Protein Technical Manual

Recombinant Human PAPS Synthase 1/PAPSS1 Protein (His Tag)

RPES1190

Product Data:

Product SKU: RPES1190

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: O43252

Protein Information:

Molecular Mass:	71.9 kDa
AP Molecular Mass:	22 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 µm filtered solution of 20mM Tris,100mM NaCl,20% glycerol,pH 8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1;PAPS synthase 1;PAPSS 1;Sulfurylase kinase 1;SK 1;ATPSK1; PAPSS

Immunogen Information:

Sequence: Met 1-Ala624

Background:

PAPSS1 is a bifunctional enzyme with both ATP sulfurylase and APS kinase activity. In the N-terminal section, it belongs to the APS kinase family; while the C-terminal section belongs to the sulfate adenylyltransferase family. PAPSS1 can be inhibited by chlorate, and is expressed in many tissues, such as high endothelial venules (HEV) cells and in cartilage. PAPSS1 mediates two steps in the sulfate activation pathway. The first step is the transfer of a sulfate group to ATP to yield adenosine 5'-phosphosulfate (APS), and the second step is the transfer of a phosphate group from ATP to APS yielding 3'-phosphoadenylylsulfate. In mammals, PAPS is the sole source of sulfate; APS appears to be only an intermediate in the sulfate-activation pathway. PAPSS1 also involved in the biosynthesis of sulfated L-selectin ligands in endothelial cells.