Recombinant Protein Technical Manual

Recombinant Human DAPK3/ZIPK Protein (GST Tag)(Active)

RPES1534

Product Data:

Product SKU: RPES1534

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_001339.1

Protein Information:

Molecular Mass:	79 kDa
AP Molecular Mass:	70 kDa
Tag:	N-GST
Bio-activity:	The specific activity was determined to be 5 nmol/min/mg using MBP as substrate.
Purity:	> 85 % 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 sterile 20mM Tris, 500mM NaCl, 10mM GSH, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	DLK;ZIP;ZIPK

Immunogen Information:

Sequence: Met 1-Arg 454

Background:

Death-associated protein kinase 3, also known as DAP kinase 3, ZIP-kinase, DAPK3 and ZIPK, is a nucleus and cytoplasm protein which belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and DAP kinase subfamily. DAPK3 / ZIPK contains one protein kinase domain. It is a serine/threonine kinase which acts as a positive regulator of apoptosis. It phosphorylates histone H3 on 'Thr1' at centromeres during mitosis. DAPK3 / ZIPK is a homodimer or forms heterodimers with ATF4. Both interactions require an intact leucine zipper domain and oligomerization is required for full enzymatic activity. It also binds to DAXX and PAWR, possibly in a ternary complex which plays a role in caspase activation. DAPK3 / ZIPK regulates myosin light chain phosphatase through phosphorylation of MYPT1 thereby regulating the assembly of the actin cytoskeleton, cell migration, invasiveness of tumor cells, smooth muscle contraction and neurite outgrowth. It is involved in the formation of promyelocytic leukemia protein nuclear body (PML-NB), one of many subnuclear domains in the eukaryotic cell nucleus, and which is involved in oncogenesis and viral infection.