Data Sheet (Cat.No.TMPY-04417)

TargetMol

DAPK1 Protein, Human, Recombinant (aa 1-363, His & GST)

General Information

Synonyms:	DAPK;death-associated protein kinase 1;ROCO3
Protein Construction:	A DNA sequence encoding the N-terminal segment of human DAPK1 (P53355-1) (Met 1-Leu 363) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P53355-1
Molecular Weight:	69.4 kDa (predicted); 64 kDa (reducing conditions)

QC Testing

Biological Activity:	The specific activity was determined to be 20 nmol/min/mg using synthetic R11-S6-Peptide (R11-IAKRRRLSSLRASTSKSESSQK) as substrate.
Purity:	> 80 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10% gly.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

Shipping with blue ice.

Protein Background

Death-associated protein kinase 1, also known as DAP kinase 1, DAPK1 and DAPK, is a cytoplasm protein which belongs to theprotein kinase superfamily, CAMK Ser / Thr protein kinase family and DAP kinase subfamily. DAPK1 contains tenANK repeats, onedeath domain and oneprotein kinase domain. DAPK1 is a calcium / calmodulin-dependent serine/threonine kinase which acts as a positive regulator of apoptosis. DAPK1 gene is a candidate tumor suppressor (TSG) and the abnormal methylation of DAPK1 gene has been found in many carcinomas. DAPK1 over-expression can induce cell apoptosis and inhibit tumor cell metastasis. DAPK1 gene over-expression could suppress PGCl3 cells malignant phenotype, inhibit PGCl3 cells growth, invasive, migration and adhesion ability, upregulate p53 gene and downregulate bcl-2 gene. Loss of activity of death-associated protein kinase 1 (

DAPK1) may be an independent factor affecting survival of non-small cell lung cancer patients. DAPK1 promoter methylation might play a significant role in the progression of chronic myeloid leukemia (CML).

Reference

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