

Human DAPK1 / DAP Kinase 1 Protein (aa 1-363, His & GST Tag)

Catalog Number: 11966-H20B



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

DAPK

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.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Bio Activity:

The specific activity was determined to be 20 nmol/min/mg using synthetic R11-S6-Peptide (R11-IAKRRRLSSLRASTSKSESSQK) as substrate.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human DAPK1 (aa 1-363)/GST chimera consists of 600 amino acids and has a calculated molecular mass of 69.4 kDa. It migrates as an approximately 64 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Supplied as sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% gly

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

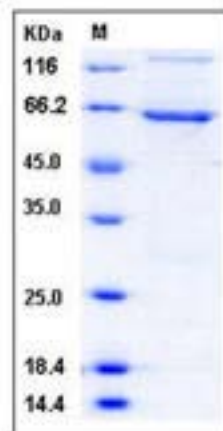
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Death-associated protein kinase 1, also known as DAP kinase 1, DAPK1 and DAPK, is a cytoplasm protein which belongs to the protein kinase superfamily, CAMK Ser / Thr protein kinase family and DAP kinase subfamily. DAPK1 contains ten ANK repeats, one death domain and one protein 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 PG13 cells malignant phenotype, inhibit PG13 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).

References

1.Zhang,H.T. et al., 2004, Ai Zheng. 23 (5):497-501. 2.Martoriati,A. et al., 2005, Oncogene. 24 (8):1461-6. 3.Li,Y. et al., 2006, Hum Mol Genet. 15 (17): 2560-8.

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For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>