



Recombinant Protein Technical Manual  
Recombinant Human DAPK1/DAP Kinase 1 Protein  
(aa 1-363, His & GST Tag)(Active)  
RPES0998

#### Product Data:

**Product SKU:** RPES0998

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** P53355

#### Protein Information:

**Molecular Mass:** 69.4 kDa

**AP Molecular Mass:** 64 kDa

**Tag:** N-His & GST

**Bio-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 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, pH 8.0, 10% gly

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

**Application:**

**Synonyms:** DAPK

## Immunogen Information:

**Sequence:** Met 1-Leu 363

## Background:

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 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 ).