

## TAOK3 Protein, Human, Recombinant (aa 1-411, His & GST)

### General Information

Synonyms:	DPK;MAP3K18;TAO kinase 3;JIK
Protein Construction:	A DNA sequence encoding the amino acids (Met 1-Asp 411) of human TAOK3 (Q9H2K8-1) 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:	Q9H2K8-1
Molecular Weight:	74.3 kDa (predicted); 85 kDa (reducing conditions)

### QC Testing

Biological Activity:	The specific activity was determined to be 10 nmol/min/mg using synthetic PKCtide peptide (ERM RPRKRQGSVRRRV) as substrate.
Purity:	> 92 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/ $\mu$ g of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, 3 mM GSH, pH 7.4, 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. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	Proteins are shipped with blue ice.

### Protein Background

Serine/threonine-protein kinase TAOK3, also known as cutaneous T-cell lymphoma-associated antigen HD-CL-9, CTCL-associated antigen HD-CL-9, Dendritic cell-derived protein kinase, JNK / SAPK-inhibitory kinase, Jun kinase-inhibitory kinase, Kinase from chicken homolog A, Thousand and one amino acid protein 3, JIK, TAOK3 and MAP3K18, is cytoplasm and peripheral membrane protein which belongs to the protein kinase superfamily, STE Ser/Thr protein kinase family and STE2 subfamily. Protein kinases are pivotal regulators of cell signaling that modulate each other's functions and activities through site-specific phosphorylation events. TAOK3 / JIK contains one protein kinase domain. TAOK3 / JIK is ubiquitously expressed at a low level, and highly expressed in

## A DRUG SCREENING EXPERT

---

peripheral blood leukocytes (PBLs), thymus, spleen, kidney, skeletal muscle, heart and liver. TAOK3 / JIK inhibits the basal activity of Jun kinase. It is negatively regulated by epidermal growth factor (EGF). When overexpressed, TAOK3 / JIK may activate ERK1 / ERK2 and JNK / SAPK.

### Reference

- Tassi E., et al., 1999, J. Biol. Chem. 274:33287-95.  
Yoneda T., et al., 2001, J. Biol. Chem. 276:13935-40.  
Yustein J.T., et al., 2003, Oncogene 22:6129-41.  
Daub H., et al., 2008, Mol. Cell 31:438-48.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481