

## Recombinant Human TBK1 protein, GST-tagged

**Cat. No.** TBK1-336H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human TBK1(590 - 729 aa) fused with GST tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	590-729 a.a.
<b>Description</b>	The NF-kappa-B (NFKB) complex of proteins is inhibited by I-kappa-B (IKB) proteins, which inactivate NFKB by trapping it in the cytoplasm. Phosphorylation of serine residues on the IKB proteins by IKB kinases marks them for destruction via the ubiquitination pathway, thereby allowing activation and nuclear translocation of the NFKB complex. The protein encoded by this gene is similar to IKB kinases and can mediate NFKB activation in response to certain growth factors.
<b>Form</b>	Protein lyophilized in sterile PBS (58 mM Na <sub>2</sub> HPO <sub>4</sub> , 17 mM NaH <sub>2</sub> PO <sub>4</sub> , 68 mM NaCl, 100 mM GSH, pH 8.0). Trehalose (5-8%) and mannitol (5-8%) protectants were added before lyophilization.
<b>Purity</b>	> 90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
<b>Storage</b>	Store for up to 12 months at -20 centigrade to -80 centigrade as lyophilized powder.Storage of Reconstituted Protein:Short-term storage: Store at 2-8 centigrade for two weeks.Long-term storage: Aliquot and store at -20 centigrade to -80

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centigrade for up to 6 months, buffer containing 50% glycerol is recommended for reconstitution. Avoid repeat freeze-thaw cycles.

**Reconstitution**

Reconstitute at 0.25 g/μl in 200 μl sterile water for short-term storage. Reconstitution with 200 μl 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.

## GENE INFORMATION

<b>Gene Name</b>	TBK1 TANK-binding kinase 1 [ Homo sapiens ]
<b>Official Symbol</b>	TBK1
<b>Synonyms</b>	TBK1; TANK-binding kinase 1; serine/threonine-protein kinase TBK1; NAK; NF-kB-activating kinase; NF-kappa-B-activating kinase; T2K; FLJ11330;
<b>Gene ID</b>	29110
<b>mRNA Refseq</b>	NM_013254
<b>Protein Refseq</b>	NP_037386
<b>MIM</b>	604834
<b>UniProt ID</b>	Q9UHD2
<b>Chromosome</b>	12q14.2

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**Location****Pathway**

Activated TLR4 signalling, organism-specific biosystem; Activation of IRF3/IRF7 mediated by TBK1/IKK epsilon, organism-specific biosystem; Cytosolic DNA-sensing pathway, organism-specific biosystem; Cytosolic DNA-sensing pathway, conserved biosystem; Cytosolic sensors of pathogen-associated DNA, organism-specific biosystem; DAI mediated induction of type I IFNs, organism-specific biosystem; Hepatitis C, organism-specific biosystem;

**Function**

ATP binding; nucleic acid binding; nucleotide binding; phosphoprotein binding; protein binding; protein kinase activity; protein serine/threonine kinase activity;

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