

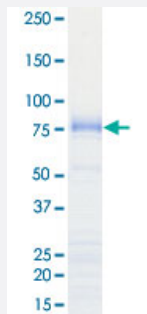
Bioactive

Full-Length

ZAK (Human) Recombinant Protein

Catalog # P5667 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human ZAK (NP_598407.1, 1 a.a. - 455 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	79
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	67 % by SDS-PAGE/CBB staining

Activity	The activity was determined by ELISA. The enzyme was incubated with GST-fused substrate protein, and after stopping kinase reaction by EDTA, the reaction solution was transferred into glutathione-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit IgG. Substrate: MAP2K7 [inactive mutant]. ATP: 100 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — ZAK

Entrez GeneID	51776
Protein Accession#	NP_598407.1
Gene Name	ZAK
Gene Alias	AZK, MLK7, MLT, MLTK, MRK, mlklak
Gene Description	sterile alpha motif and leucine zipper containing kinase AZK
Omim ID	609479
Gene Ontology	Hyperlink
Gene Summary	This gene is a member of the MAPKKK family of signal transduction molecules and encodes a protein with an N-terminal kinase catalytic domain, followed by a leucine zipper motif and a sterile-alpha motif (SAM). This magnesium-binding protein forms homodimers and is located in the cytoplasm. The protein mediates gamma radiation signaling leading to cell cycle arrest and activity of this protein plays a role in cell cycle checkpoint regulation in cells. The protein also has pro-apoptotic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq]

Other Designations

MLK-like mitogen-activated protein triple kinase|MLK-related kinase|cervical cancer suppressor gene 4 protein|leucine zipper- and sterile alpha motif-containing kinase|mitogen-activated protein kinase kinase kinase MLT|mixed lineage kinase 7|mixed lineage

Pathway

- [MAPK signaling pathway](#)
- [Tight junction](#)

Disease

- [Kidney Failure](#)
- [Tobacco Use Disorder](#)