

ZAK Antibody (monoclonal) (M02)**Mouse monoclonal antibody raised against a full length recombinant ZAK.****Catalog # AT4567a****Specification**

ZAK Antibody (monoclonal) (M02) - Product Information

Application	WB, IF, E
Primary Accession	O9NYL2
Other Accession	BC001401
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	91155

ZAK Antibody (monoclonal) (M02) - Additional Information**Gene ID** 51776**Other Names**

Mitogen-activated protein kinase kinase kinase MLT, Human cervical cancer suppressor gene 4 protein, HCCS-4, Leucine zipper- and sterile alpha motif-containing kinase, MLK-like mitogen-activated protein triple kinase, Mixed lineage kinase-related kinase, MLK-related kinase, MRK, Sterile alpha motif- and leucine zipper-containing kinase AZK, ZAK, MLTK

Target/Specificity

ZAK (AAH01401.1, 1 a.a. ~ 455 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IF~~1:50~200

E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

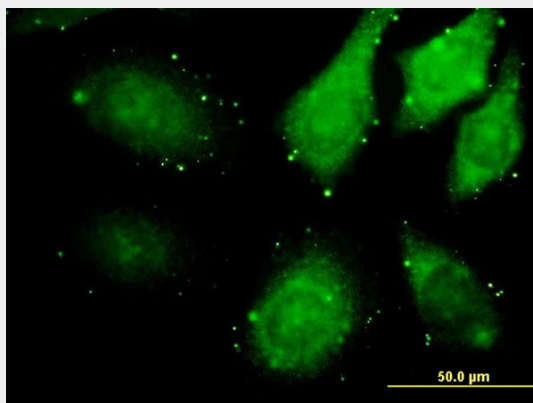
ZAK Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

ZAK Antibody (monoclonal) (M02) - Protocols

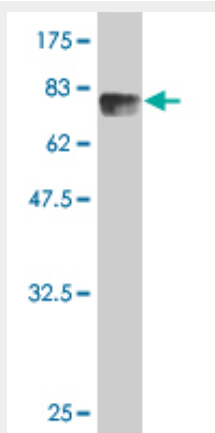
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

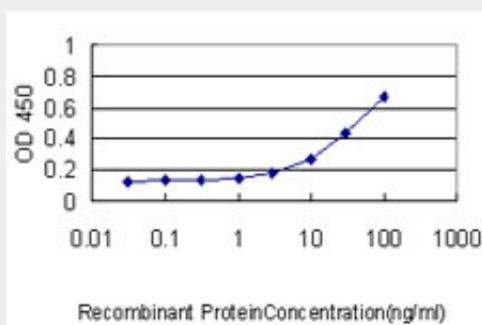
ZAK Antibody (monoclonal) (M02) - Images



Immunofluorescence of monoclonal antibody to ZAK on HeLa cell. [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (75.79 KDa) .



Detection limit for recombinant GST tagged ZAK is approximately 0.3ng/ml as a capture antibody.

ZAK Antibody (monoclonal) (M02) - Background

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.

ZAK Antibody (monoclonal) (M02) - References

Mapping of phosphorylation sites in human MSK1 activated by a novel interaction with MRK-beta. Wang W, et al. Electrophoresis, 2010 Apr. PMID 20408143. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. ZAK inhibits human lung cancer cell growth via ERK and JNK activation in an AP-1-dependent manner. Yang JJ, et al. Cancer Sci, 2010 Jun. PMID 20331627. ZAK: a MAP3Kinase that transduces Shiga toxin- and ricin-induced proinflammatory cytokine expression. Jandhyala DM, et al. Cell Microbiol, 2008 Jul. PMID 18331592. Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.