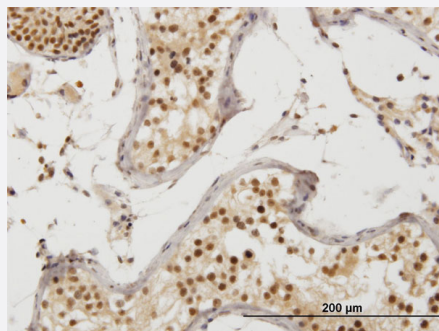


ZAK monoclonal antibody (M03), clone 3G5

Catalog # H00051776-M03

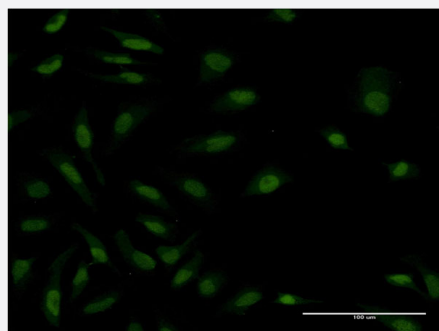
Size 100 ug

Applications



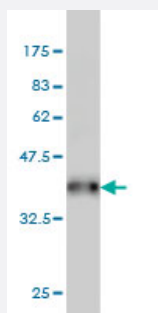
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to ZAK on formalin-fixed paraffin-embedded human prostate. [antibody concentration 3 ug/ml]



Immunofluorescence

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



Western Blot detection against Immunogen (38.83 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant ZAK.

Immunogen	ZAK (AAH01401, 1 a.a. ~ 120 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MSSLGASFVQIKFDDLQFFENC GGSGFSGSVYRAKWISQDKEVAVKKLLKIEKEAEILSVLSHRNIIQ FYGVILEPPNYGIVTEYASLGSLYDYINSNRSEEMDMDHIMTWATDVAKGMHY
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (92)
Isotype	IgG3 Lambda
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (38.83 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to ZAK on formalin-fixed paraffin-embedded human prostate. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- ELISA
- Immunofluorescence

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

Gene Info — ZAK

Entrez GeneID	51776
GeneBank Accession#	BC001401

Protein Accession#	AAH01401
Gene Name	ZAK
Gene Alias	AZK, MLK7, MLT, MLTK, MRK, mklak
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

Publication Reference

- [A Requirement for ZAK Kinase Activity in Canonical TGF- \$\beta\$ Signaling.](#)

Nyati S, Chator A, Schinske K, Gregg BS, Ross BD, Rehemtulla A.

Translational Oncology 2016 Oct; 9(6):473.

Application: IP-WB, WB-Tr, Human, A549, MDA-231-1833, HEK 293T cells

- [A-Kinase Anchoring Protein Lbc Coordinates a p38 Activating Signaling Complex Controlling Compensatory Cardiac Hypertrophy.](#)

Perez Lopez I, Cariolato L, Maric D, Gillet L, Abriel H, Diviani D.

Molecular and Cellular Biology 2013 Aug; 33(15):2903.

Application: WB-Ce, WB-Tr, WB-Ti, Rat, Mouse, Neonatal ventricular myocytes, Cardiac

- [AKAP-LBC anchors a PKN-based signaling complex involved in alpha1-adrenergic receptor-induced p38 activation.](#)

Cariolato L, Cavin S, Diviani D.

The Journal of Biological Chemistry 2011 Mar; 286(10):7925.

Application: WB, Human, HEK 293 cells

Pathway

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

Disease

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