10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

TIE1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1914a

Specification

TIE1 Antibody - Product Information

Application	**E, WB, IHC**
Primary Accession	P35590
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**125kDa KDa**

Description
This gene encodes a member of the tyrosine protein kinase family. The encoded protein plays a critical role in angiogenesis and blood vessel stability by inhibiting angiopoietin 1 signaling through the endothelial receptor tyrosine kinase Tie2. Ectodomain cleavage of the encoded protein relieves inhibition of Tie2 and is mediated by multiple factors including vascular endothelial growth factor. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.r

Immunogen
Purified recombinant fragment of human TIE1 (AA: 385-607) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide.

TIE1 Antibody - Additional Information

Gene ID 7075

Other Names
Tyrosine-protein kinase receptor Tie-1, 2.7.10.1, TIE1, TIE

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
TIE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TIE1 Antibody - Protein Information

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Name TIE1

Synonyms TIE

Function
Transmembrane tyrosine-protein kinase that may modulate TEK/TIE2 activity and contribute to the regulation of angiogenesis.

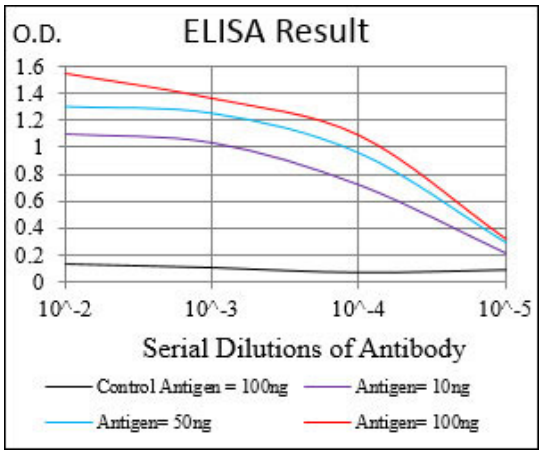
Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Specifically expressed in developing vascular endothelial cells.

TIE1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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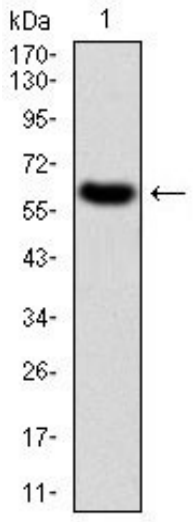


Figure 1: Western blot analysis using TIE1 mAb against human TIE1 (AA: 385-607) recombinant protein. (Expected MW is 50.6 kDa)

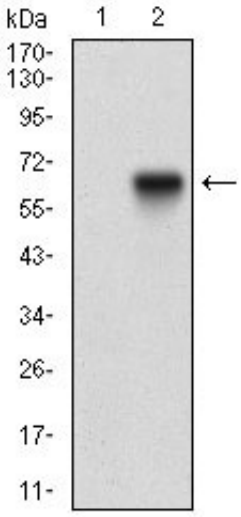


Figure 2: Western blot analysis using TIE1 mAb against HEK293 (1) and TIE1 (AA: 385-607)-hIgGFc transfected HEK293 (2) cell lysate.

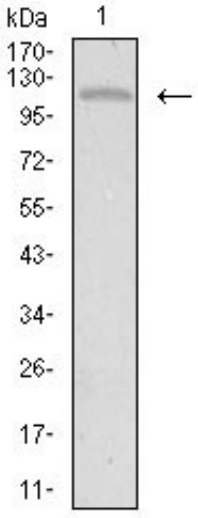


Figure 3: Western blot analysis using TIE1 mouse mAb against HepG2 cell lysate.

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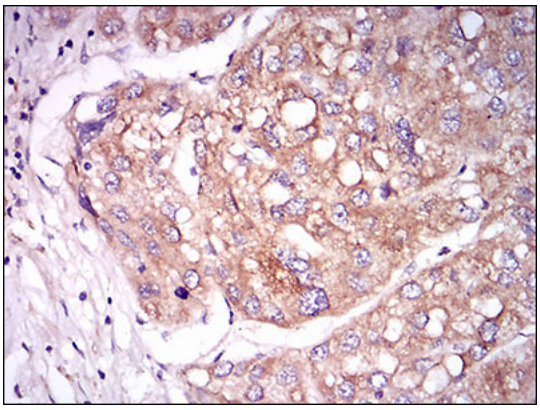


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using TIE1 mouse mAb with DAB staining.

TIE1 Antibody - Background

This gene is a classical cadherin from the cadherin superfamily and is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Functioning as a classic cadherin by imparting to cells the ability to adhere in a homophilic manner, the protein may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. An alternative splice variant has been described but its full length sequence has not been determined. ; ;

TIE1 Antibody - References

1. Int J Oncol. 2007 Oct;31(4):893-7.r2. Cancer. 2002 Mar 1;94(5):1517-21.r