

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS11231**Specification**

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - Product Information

Application	IHC
Primary Accession	Q15389
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58kDa KDa

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - Additional Information**Gene ID** 284**Other Names**

Angiopoietin-1, ANG-1, ANGPT1, KIAA0003

Target/Specificity

Synthetic peptide N-Q-R-R-N-P-E-N-G-G-R-R-Y-N-R-I-Q-H-G-Q corresponding to a region (aa 21-40) near the N-terminus of mouse angiopoietin 1 protein conjugated to KLH using maleimide. A residue of cysteine was added to the amino terminal end to facilitate ...

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - Protein Information**Name** ANGPT1**Synonyms** KIAA0003**Function**

Binds and activates TEK/TIE2 receptor by inducing its dimerization and tyrosine phosphorylation. Plays an important role in the regulation of angiogenesis, endothelial cell survival, proliferation, migration, adhesion and cell spreading, reorganization of the actin cytoskeleton, but also maintenance of vascular quiescence. Required for normal angiogenesis and heart development during embryogenesis. After birth, activates or inhibits angiogenesis, depending on the context. Inhibits angiogenesis and promotes vascular stability in quiescent vessels, where endothelial cells have tight contacts. In quiescent vessels, ANGPT1 oligomers recruit TEK to cell-cell contacts, forming complexes with TEK molecules from adjoining cells, and this leads to preferential activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascades. In migrating

endothelial cells that lack cell-cell adhesions, ANG1 recruits TEK to contacts with the extracellular matrix, leading to the formation of focal adhesion complexes, activation of PTK2/FAK and of the downstream kinases MAPK1/ERK2 and MAPK3/ERK1, and ultimately to the stimulation of sprouting angiogenesis. Mediates blood vessel maturation/stability. Implicated in endothelial developmental processes later and distinct from that of VEGF. Appears to play a crucial role in mediating reciprocal interactions between the endothelium and surrounding matrix and mesenchyme.

Cellular Location

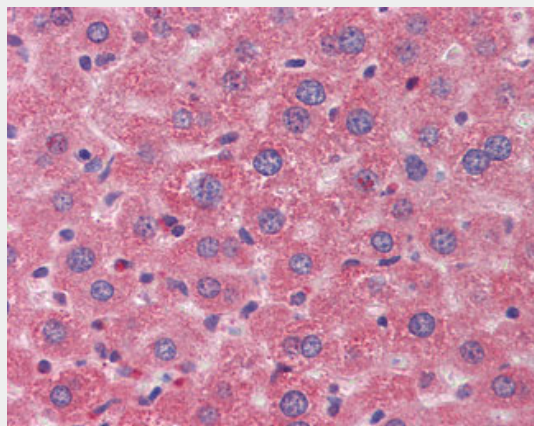
Secreted.

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - 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](#)

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - Images



Anti-ANGPT1 / Angiopoietin-1 antibody IHC staining of mouse liver.

ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - Background

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ANGPT1 / Angiopoietin-1 Antibody (N-Terminus) - References

Davis S.,et al.Cell 87:1161-1169(1996).

Nakatsukasa M.,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

Shan Z.X.,et al.Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.

Nomura N.,et al.DNA Res. 1:27-35(1994).

Bechtel S.,et al.BMC Genomics 8:399-399(2007).