

# Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody

Catalog # ABO14190

# **Specification**

### Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody - Product Information

Application WB
Primary Accession O15389
Host Rabbit
Isotype Rabbit IgG
Reactivity Rat, Human
Clonality Monoclonal
Format Liquid

**Description** 

Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Rat.

### Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 284

**Other Names** 

Angiopoietin-1, ANG-1, ANGPT1, KIAA0003

Calculated MW 57513 MW KDa

**Application Details** WB 1:1000-1:5000

**Subcellular Localization** 

Secreted.

**Contents** 

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen** 

A synthesized peptide derived from human Angiopoietin 1

**Purification** 

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

# Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody - 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, ANGT1 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.

### Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal 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

### Anti-Angiopoietin 1 ANGPT1 Rabbit Monoclonal Antibody - Images



