

Angiopoietin 1 Rabbit mAb

Catalog # AP74829

Specification

Angiopoietin 1 Rabbit mAb - Product Information

Application Primary Accession Reactivity Host

Calculated MW

Human, Rat Rabbit Clonality

Monoclonal Antibody

57513

WB

Q15389

Angiopoietin 1 Rabbit mAb - Additional Information

Gene ID 284

Other Names ANGPT1

Dilution WB~~1/500-1/1000

Format Liquid

Angiopoietin 1 Rabbit mAb - 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.

Angiopoietin 1 Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Angiopoietin 1 Rabbit mAb - Images

