10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



Angiopoietin 1 Rabbit mAb

Catalog # AP74829

Product Information

Application WB
Primary Accession Q15389
Reactivity Human, Rat
Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 57513

Additional Information

Gene ID 284

Other Names ANGPT1

Dilution WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Protein Information

Name ANGPT1

Synonyms KIAA0003

Function Binds and activates TEK/TIE2 receptor by inducing its dimerization and

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

tyrosine phosphorylation. Plays an important role in the regulation of

stimulation of sprouting angiogenesis. Mediates blood vessel

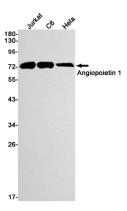
maturation/stability. Implicated in endothelial developmental processes later and distinct from that of VEGF. Appears to play a crucial role in mediating reciprocal interactions between the endothelium and surrounding matrix and

downstream kinases MAPK1/ERK2 and MAPK3/ERK1, and ultimately to the

Cellular Location

Secreted.

Images



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.