

Rabbit Tie2 Polyclonal Antibody | anti-Tie2 antibody

Phospho-Tie2 (Tyr992) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321406	Rabbit	Human, Mouse, Rat	Immunohistochemistry, Western Blot

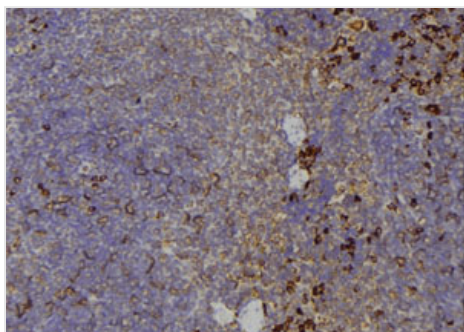
PRODUCT SYNONYMS

Tie2; Polyclonal Antibody; Phospho-Tie2 (Tyr992) Antibody; Angiopoietin 1 receptor; Angiopoietin-1 receptor; CD202b; CD202b antigen; Endothelial tyrosine kinase; Endothelium specific receptor tyrosine kinase 2; hTIE 2; hTIE2; Hyk; p140 TEK; Soluble TIE2 variant 1; Soluble TIE2 variant 2; Tek; tek tyrosine kinase; TEK tyrosine kinase endothelial; endothelial; TIE 2; TIE2; TIE2_HUMAN; Tunica interna endothelial cell kinase; Tyrosine kinase with Ig and EGF homology domains 2; Tyrosine kinase with Ig and EGF homology domains-2; Tyrosine protein kinase receptor TEK; Tyrosine protein kinase receptor TIE 2; Tyrosine-protein kinase receptor TEK; Tyrosine-protein kinase receptor TIE-2; Venous malformations multiple cutaneous and mucosal; VMCM 1; VMCM; VMCM1; anti-Tie2 antibody

PRODUCT SPECIFICATIONS

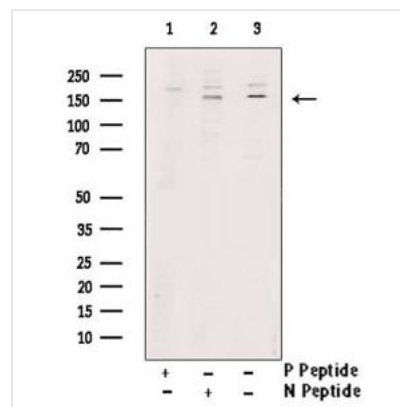
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-Tie2 (Tyr992) antibody detects endogenous levels of Tie2.
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-Tie2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Tie2 around the phosphorylation site of Tyr992.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA321406 at 1/100 staining Human lymph node tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of extracts from 293 cells transfected with wild-type Tie2, using Phospho-Tie2 (Tyr992) Ab. Lane 1 was treated with phospho-blocking peptide, Lane 2 was treated with non-phospho-blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-Tie2 antibody	Function: Tyrosine-protein kinase that acts as cell-surface receptor for ANGPT1, ANGPT2 and ANGPT4 and regulates angiogenesis, endothelial cell survival, proliferation, migration, adhesion and cell spreading, reorganization of the actin cytoskeleton, but also maintenance of vascular quiescence. Has anti-inflammatory effects by preventing the leakage of proinflammatory plasma proteins and leukocytes from blood vessels. Required for normal angiogenesis and heart development during embryogenesis. Required for post-natal hematopoiesis. 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, ANGPT1 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. ANGPT1 signaling triggers receptor dimerization and autophosphorylation at specific tyrosine residues that then serve as binding sites for scaffold proteins and effectors. Signaling is modulated by ANGPT2 that has lower affinity for TEK, can promote TEK autophosphorylation in the absence of ANGPT1, but inhibits ANGPT1-mediated signaling by competing for the same binding site. Signaling is also modulated by formation of heterodimers with TIE1, and by proteolytic processing that gives rise to a soluble TEK extracellular domain. The soluble extracellular domain modulates signaling by functioning as decoy receptor for angiopoietins. TEK phosphorylates DOK2, GRB7, GRB14, PIK3R1; SHC1 and TIE1. Similarity: The soluble extracellular domain is functionally active in angiopoietin binding and can modulate the activity of the membrane-bound form by competing for angiopoietins. Belongs to the protein kinase superfamily. Tyr protein kinase family. Tie subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	88758596
NCBI GeneID	7010
NCBI Accession #	NP_000450.2
NCBI GenBank Nucleotide #	NM_000459.4
UniProt Accession #	Q02763; Q5TCU2; Q8IV34; A8K6W0; B4DH20; B4DHD3; D3DRK5; E7EWI2
Molecular Weight	160 kDa
NCBI Official Full Name	angiopoietin-1 receptor isoform 1
NCBI Official Synonym Full Names	TEK receptor tyrosine kinase
NCBI Official Symbol	TEK
NCBI Official Synonym Symbols	TIE2; VMCM; GLC3E; TIE-2; VMCM1; CD202B
NCBI Protein Information	angiopoietin-1 receptor
UniProt Protein Name	Angiopoietin-1 receptor
UniProt Gene Name	TEK
UniProt Synonym Gene Names	TIE2; VMCM; VMCM1; hTIE2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.