Immunotag™ Tie-2 Antibody

Antibody Specification

Catalog No.	ITA7534
Product Description	Immunotag™ Tie-2 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Tie-2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:1000-3000 IHC 1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human Tie-2
Specificity	Tie-2 Antibody detects endogenous levels of total Tie-2
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	TEK
Accession No.	Q02763

Antibody Specification

Alternate Names	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; tek tyrosine kinase, 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;
Description	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, 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. 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.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	126 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.