SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-TIE1/AF350 Conjugated antibody

SL1334R-AF350

Product Name	Anti-TIE1/AF350
Chinese Name	AF350 标记的血管生成素受体 1 抗体
Alias	TIE1_HUMAN; JKT 14; JTK14; TIE; Tyrosine Kinase with Immunoglobulin and Epidermal Growth Factor Homology Domains; Tyrosine protein kinase receptor Tie 1; Tyrosine-protein kinase receptor Tie-1; tyrosine kinase receptor 1; tyrosine kinase with immunoglobulin-like and EGF-like domains 1.
Research Area	Tumour Cardiovascular Signal transduction Stem cells Growth factors and hormones
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	123kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Tie1
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** TIE1/TIE (tyrosine kinase with Ig and EGF homology domains 1) and TIE2/Tek define a new class of the receptor tyrosine kinase (RTK) subfamily with unique structural characteristics: two immunoglobulin like domains

flanking three epidermal growth factor (EFG) like domains followed by three fibronectin type III like repeats in the extracellular region and a split tyrosine kinase domain in the cytoplasmic region. Human TIE1 cDNA encodes a 1138 amino acid residue precursor protein with a putative signal peptide, an extracellular domain, and a cytoplasmic domain. Human TIE1/Fc, a disulfide linked homodimeric protein, has a calculated molecular mass of approximately 107 kDa. Due to glycosylation, the protein migrates to approximately 160 kDa in SDS PAGE under reducing conditions. TIE1 and TIE2, expressed primarily on endothelial and hematopoietic progenitor cells, play important roles in angiogenesis, vasculogenesis, and hematopoiesis. In developing vascular endothelial cells, TIE1 and TIE2 are specifically expressed. Two ligands that bind TIE have been identified, angiopoietin 1 and angiopoietin 2. Based on gene targeting studies, the in vivo functions of TIE1 are related to endothelial cell differentiation. The receptor tyrosine kinase TIE also plays a role in the survival and integrity of the endothelium.

Function:
Transmembrane tyrosine-protein kinase that may modulate TEK/TIE2 activity and contribute to the regulation of angiogenesis.

Subunit:
Heterodimer with TEK/TIE2.

Subcellular Location:
Cell membrane; Single-pass type I membrane protein.

Tissue Specificity:
Specifically expressed in developing vascular endothelial cells.

Post-translational modifications:
Phosphorylated on tyrosine residues in response to ANGPT1, most likely by TEK/TIE2.

Similarity:
Belongs to the protein kinase superfamily. Tyr protein kinase family. Tie subfamily.
Contains 3 EGF-like domains.
Contains 3 fibronectin type-III domains.
Contains 2 Ig-like C2-type (immunoglobulin-like) domains.
Contains 1 protein kinase domain.

Database links:

Entrez Gene: 280941 Cow

Entrez Gene: 7075 Human

Entrez Gene: 21846 Mouse

Entrez Gene: 89806 Rat

Omim: 600222 Human

SwissProt: Q06805 Cow

SwissProt: P35590 Human

SwissProt: Q06806 Mouse

Unigene: 78824 Human

Unigene: 4345 Mouse

Unigene: 13171 Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

血管生成素-1 受体又称上皮生长因子样域酪氨酸激酶 1 或内皮酪氨酸激酶受体,Tie1 在 vascular endothelial cell、腺上皮及间质细胞中均有表达，主要定位于细胞质。