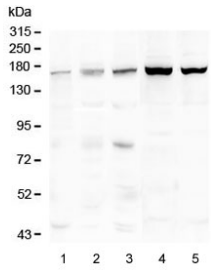
TEK Antibody / TIE2 / TEK receptor tyrosine kinase (RQ4918)

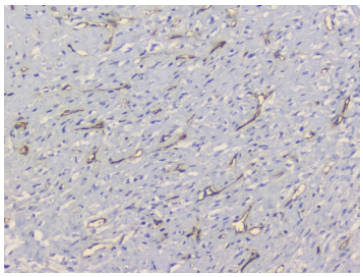
Catalog No.	Formulation	Size
RQ4918	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

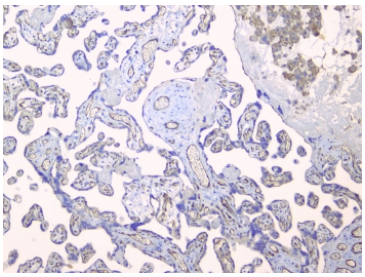
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q02763
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This TEK antibody is available for research use only.



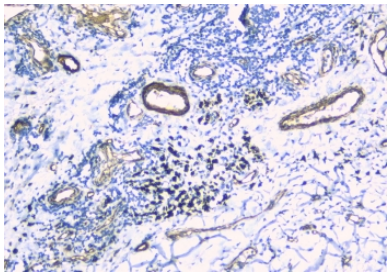
Western blot testing of 1) placenta, 2) Caco-2, 3) human HeLa, 4) rat liver and 5) mouse liver lysate with TEK antibody at 0.5ug/ml. Predicted molecular weight: ~126 kDa but may be observable at 130-165 kDa.



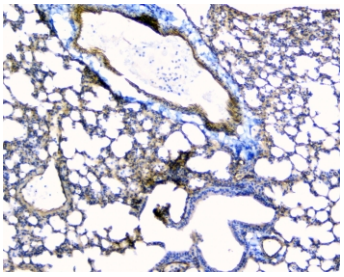
IHC staining of FFPE human breast cancer with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



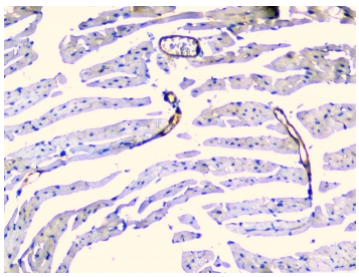
IHC staining of FFPE human placenta with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



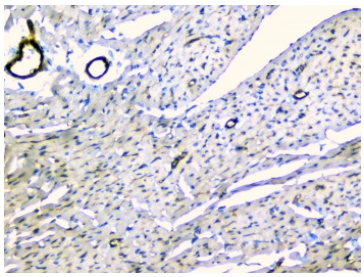
IHC staining of FFPE human lung cancer with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE mouse lung with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE mouse heart with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE rat heart with TEK antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.

Description

TEK antibody, also known as TEK receptor tyrosine kinase antibody, recognizes a transmembrane receptor tyrosine kinase encoded by the TEK gene. This protein is commonly referred to as TIE2, Tunica interna endothelial cell kinase, and CD202b in the literature. TEK is primarily expressed in vascular endothelial cells, where it plays a central role in angiogenesis, vascular remodeling, and endothelial cell survival.

TEK belongs to the receptor tyrosine kinase family and contains extracellular immunoglobulin-like domains, epidermal growth factor-like repeats, fibronectin type III repeats, a single transmembrane segment, and an intracellular tyrosine kinase domain. Binding of its ligands, Angiopoietin-1 and Angiopoietin-2, induces receptor dimerization and

autophosphorylation, activating downstream signaling pathways such as PI3K-AKT and MAPK that regulate endothelial quiescence, migration, and vessel maturation.

During embryonic development, TEK signaling is essential for vascular network formation and stabilization. In adult tissues, TEK maintains endothelial integrity and regulates vascular permeability. Dysregulated TEK activity has been implicated in tumor angiogenesis, inflammatory disorders, and vascular malformations. Activating mutations in the TEK gene are associated with inherited venous malformations, highlighting its importance in vascular biology.

TEK receptor tyrosine kinase is predominantly localized to the plasma membrane of endothelial cells, with activated receptor complexes undergoing internalization and cytoplasmic signaling. Because of its endothelial-restricted expression pattern, TEK antibody is widely used in research settings to study vascular structures and angiogenic signaling pathways. A TEK antibody can be used in research applications to evaluate receptor expression and endothelial cell biology in relevant experimental systems.

Application Notes

Optimal dilution of the TEK antibody should be determined by the researcher.

Immunogen

Amino acids EALMNQHQDPLEVTQDVTREWAKKVVWK from the human protein were used as the immunogen for the TEK antibody.

Storage

After reconstitution, the TEK antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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