



20150116ML

Anti-Human TIE-2 (#21G7)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M55
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with purified human extracellular domain of TIE-2 fragment. The IgG1 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Target Background

Synonyms (Target):	TEK; TIE2; VMCM; TIE-2; VMCM1; CD202B
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Tie-1/Tie and Tie-2/Tek are receptor tyrosine kinases with unique structural characteristics including two immunoglobulin-like domains flanking three epidermal growth factor (EGF)-like domains, followed by three fibronectin type III-like repeats in the extracellular region, and a split tyrosine kinase domain in the cytoplasmic region. Tie-2 is involved in vascular stabilization and remodeling. Although less well understood, Tie-1 may also act as an ANG receptor, possibly in complex with Tie-2. Human Tie-2 cDNA encodes a 1124 amino acid (aa) residue precursor protein with an 18 residue putative signal peptide, a 727 residue extracellular domain and a 354 residue cytoplasmic domain. Tie-2 is a receptor for the angiopoietin (ANG) family: ANG-1, ANG-2, and ANG-3 (mouse)/-4 (human). Ang-2 has been reported to act as an antagonist for Ang-1. Mice engineered to overexpress Ang-2 or to lack Ang-1 or Tie-2 display similar angiogenesis defects.

Database References Target

Protein RefSeq:	NP_000450.2
Uniprot ID:	Q02763
mRNA RefSeq:	NM_000459.3

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#21G7)
Isotype	IgG1
Purification	Protein G chromatography
Antigen	human Tie2 extracellular domain
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody recognizes human Tie2 in Western blot without cross reactivity with human Tie1. Reactivity to Tie2 of other species is not tested.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

ELISA, WB, IHC

Recommended usage:

WB: 1:500-1000

ELISA: 1:200-400

IHC: 1:50

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Application/Handling

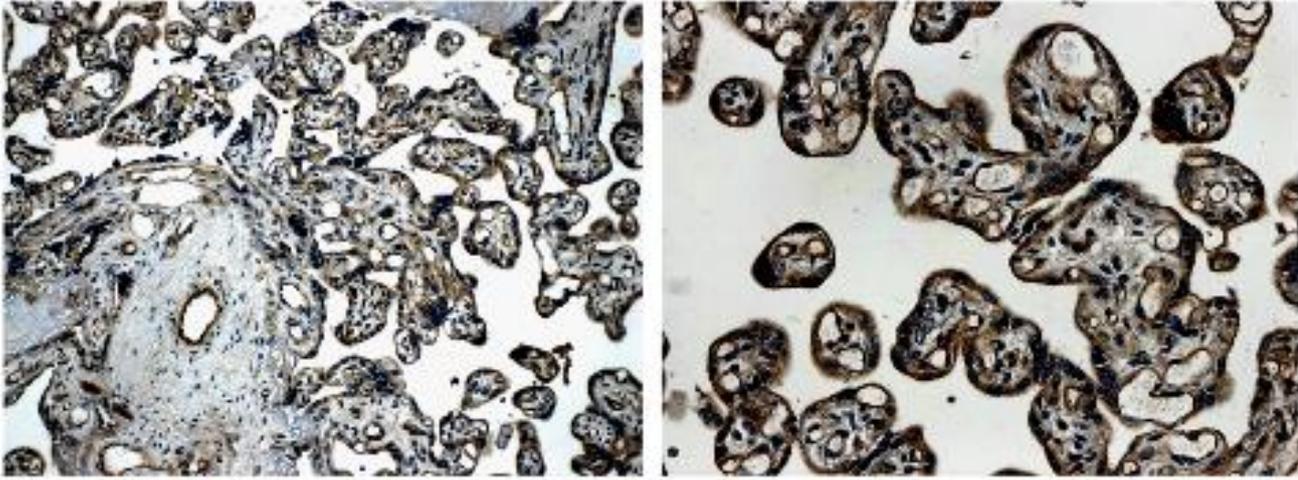


Fig. 1: Formalin fixed and paraffin embedded human placental tissue section is subjected to IHC with anti human Tie-2 (#101-M55).