ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Tyrosine Protein Kinase Receptor (TIE-2) Antibodies

Cat. TIE24-C Recombinant **Mouse** Tie-2-Fc protein for WB **SIZE**: 100 ul

FORM: Soln Lyophilized

Embryonic vascular system undergoes a series of complex, highly regulated series of events involving differentiation, migration and association of primitive endothelial cells. This process is termed vasculogenesis. A further remodeling of the primitive vascular system forms the mature cardiovascular system. This process is known as angiogenesis (sprouting of new capillary vessels from pre-existing vasculature). A family of receptor tyrosine kinases **TIE1 and TIE 2** or Tek has been identified in vascular endothelium and hematopoietic cells. Mice lacking TIE 1 or TIE 2 are lethal. Ties may represent the earliest endothelial cell lineage marker and may regulate the endothelial cell proliferation, differentiation, and proper patterning during vasculogenesis. TIEs appear to be acting downstream of the VEGFRs. **Tie-2** (human 1124 AA; mouse 1122 aa) is a type 1 membrane receptor protein specifically expressed in developing vascular endothelial cells and their progenitors, angioblasts. It is also found in placenta and lung, with lower levels in umbilical vein endothelial cells, brain and kidney. Tie-2 extracellular portion (25-279 aa) contains 3 fibronectin type III-like and 2-Ig-like C2-type, and 3-EGF-like domains.

Source of Antigen and Antibodies

Recombinant Mouse Tie-2 protein (23-744 aa, EC domain) was expressed as His-tagged Fc protein Chimera (~107 kda) and purified (>90%). For Western blot +ve control (**Cat # TIE24-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **TIE24-C** for good visibility with antibody Cat # **TIE24**-A or other anti-mouse Tie-2 antibodies. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **TIE24**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder.

General References: (1) Ziegler SF et al (1993) Oncogene 8, 663; Vikkula M et al (1996) Cell 87, 1181; Sato TN et al (1993) PNAS 90, 12056; Dumont DJ et al (1993) Oncogene 8, 1293; Horita K et al (1992) BBRC 189, 1747; Runtig AS et al (1993) Growth factors 9, 99; Dumont DJ et al (1992) Oncogene 8, 1471

**This product is for in vitro research use only.*

Related materials available from ADI

Antibodies to Ang-1, Ang-2, Tie-1, Tie-2, Recombinant Mouse and Human VEGFs, Anti-flk-1, Flt-1, and Flt-4 (VEGFRs 1-3)

Western Blot recycling kit (Use the same blot to probe with multiple antibodies Ang-1 and Ang-2, etc.) **recycle blot at room temp in 5-10 min**; No mercaptoethanol or heating required).

TIE24-C 40722A

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