Rat Tyrosine kinase with immunoglobulin-like and EGF-like domains 2 (Tie-2) ELISA Kit

Catalog No: #EK11365

Package Size: #EK11365-1 48T #EK11365-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Rat Tyrosine kinase with immunoglobulin-like and EGF-like domains 2 (Tie-2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.135 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate Tie-2 in samples. An antibody specific for Tie-2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTie-2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for Tie-2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of Tie-2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Tie-2 is a receptor tyrosine kinase that is expressed primarily on endothelial cells (ECs) and plays a critical role in vascular development. The Tie-2 gene encodes a protein of 1122 amino acids. The extracellular region has three distinct structural motifs including two immunoglobulin (Ig)-like loops separated by three EGF-like repeats, and three repeats with fibronectin type III homology located after the second Ig loop. The intracellular portion of Tie-2 contains two tyrosine kinase domains that, when phosphorylated, interact with a number of binding partners including Grb2, Grb7, Grb14, Shp2, the p85 subunit of phosphatidylinositol 3-kinase (PI3K), and Dok-R. Deletion of the last 16 amino acids of the intracellular C-terminus results in increased levels of autophosphorylation, suggesting that it may play an autoinhibitory role.

Note: This product is for in vitro research use only