# Mouse Tie2 / CD202b / TEK Protein (ECD, Fc Tag)

Catalog Number: 51087-M02H



## **General Information**

## Gene Name Synonym:

AA517024; Cd202b; Hyk; STK1; Tie-2; Tie2

#### **Protein Construction:**

A DNA sequence encoding the mouse Tek (NP\_038718.2) (Met1-Lys744) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

**Purity:** > 95 % as determined by SDS-PAGE.

## **Bio Activity:**

1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse ANGPT2 (Cat:50298-M07H) at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind mouse TEK-Fc. The EC<sub>50</sub> of mouse TEK-Fc is 0.58-1.34  $\mu$ g/mL.

#### **Endotoxin:**

< 1.0 EU per µg protein as determined by the LAL method.

#### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Val 19

# **Molecular Mass:**

The recombinant mouse Tek consists 964 amino acids and predicts a molecular mass of 107.7 kDa.

#### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

# **Usage Guide**

## Storage:

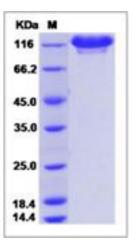
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

## Avoid repeated freeze-thaw cycles.

# Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

TEK, or TIE-2, is an endothelial cell-specific receptor tyrosine kinase (RTK) that is known as a functioning molecule of vascular endothelial cells. TEK comprises a subfamily of RTK with TIE, and these two receptors play critical roles in vascular maturation, maintenance of integrity and remodeling. Targeted mutagenesis of both Tek and its agonistic ligand, Angiopoietin-1, result in embryonic lethality, demonstrating that the signal transduction pathways mediated by this receptor are crucial for normal embryonic development. TEK signaling is indispensable for the development of the embryonic vasculature and suggests that TEK signaling may also be required for the development of the tumor vasculature.

#### References

1.Jones N, et al. (1998) The Tek / Tie2 receptor signals through a novel Dok-related docking protein, Dok-R. Oncogene. 17(9): 1097-108. 2.Sato A, et al. (1998) Characterization of TEK receptor tyrosine kinase and its ligands, Angiopoietins, in human hematopoietic progenitor cells. Int Immunol. 10(8): 1217-27. 3.Huang L, et al. (1995) GRB2 and SH-PTP2: potentially important endothelial signaling molecules downstream of the TEK / TIE2 receptor tyrosine kinase. Oncogene. 11(10): 2097-103.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • http://www.sinobiological.com