

# Recombinant Mouse TNFRSF1B/TNF-R2/CD120b Protein

Catalog No.: RP01375 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot HEK293 cells 21938 P25119

Tags C-His

#### **Synonyms**

TNFRSF1B;CD120b;TBPII;TNF-R-II;TNF-R75;TNFBR;TNFR1B;TNFR2;TNFR80;p75;TNFRSF1B;TNFRSF1B;CD120b;TBPII;TNF-R-II;TNF-

R75;TNFBR;TNFR1B;TNFR2;TNFR80;p75;TNFRSF1B

#### **Product Information**

Source

**Purification** 

HEK293 cells > 95% by SDS-

PAGE.

### **Endotoxin**

<0.1EU/µg

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## **Contact**



www.abclonal.com

# **Background**

Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B), also known as Tumor necrosis factor receptor 2 (TNFR2) or CD120b antigen, is a member of the tumor necrosis factor receptor superfamily. TNFR2/CD120b/TNFRSF1B is a member of the TNF-receptor superfamily. This protein and TNF-receptor 1 form a heterocomplex that mediates the recruitment of two anti-apoptotic proteins, c-IAP1 and c-IAP2, which possess E3 ubiquitin ligase activity. Knockout studies in mice also suggest a role of this protein in protecting neurons from apoptosis by stimulating antioxidative pathways. TNFR2/CD120b/TNFRSF1B is not a major contributing factor to the genetic risk of type 2 diabetes, its associated peripheral neuropathy and hypertension and related metabolic traits in North Indians. Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) has been reported to be associated with SLE risk in Japanese populations. TNFR2/CD120b/TNFRSF1B serves as a receptor with high affinity for TNFSF2 and approximately 5-fold lower affinity for homotrimeric TNFSF1. This receptor mediates most of the metabolic effects of TNF-alpha. Isoform 2 blocks TNFalpha-induced apoptosis, which suggests that it regulates TNF-alpha function by antagonizing its biological activity.

#### **Basic Information**

#### **Description**

Recombinant Mouse TNFRSF1B/TNF-R2/CD120b Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val23-Gly258) of mouse TNFR2/CD120b/TNFRSF1B (Accession #NP\_035740.2) fused with a 6×His tag at the C-terminus.

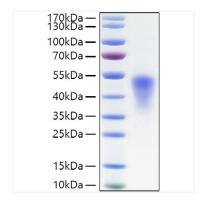
#### **Bio-Activity**

1.Measured by its binding ability in a functional ELISA. Immobilized Mouse TNFRSF1B at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Mouse TNF-alpha with a linear range of 0.64-317.13 ng/mL.|2.Measured by its ability to inhibit TNF $\alpha$ -mediated cytotoxicity in L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D.The ED<sub>50</sub> for this effect is typically 2-8  $\mu$ g/mL in the presence of 0.1 ng/mL of recombinant mouse TNF $\alpha$ .

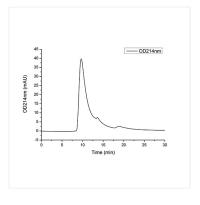
# Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. <br/> After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

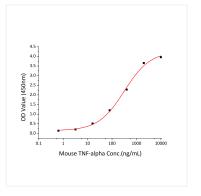
### **Validation Data**



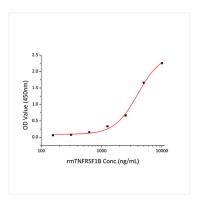
Recombinant Mouse TNFRSF1B/TNF-R2/CD120b Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 40-50kDa.



The purity of Mouse TNFR2/CD120b/TNFRSF1B Protein (Cat.RP01375) was greater than 90% as determined by SEC-HPLC.



Immobilized Mouse TNFRSF1B at  $1\mu g/mL$  (100  $\mu L/well$ ) can bind Mouse TNF-alpha with a linear range of 0.64-317.13ng/mL.



Recombinant Mouse TNFRSF1B inhibit TNF $\alpha$ -mediated cytotoxicity in L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D.The ED $_{50}$  for this effect is typically 2-8  $\mu$ g/mL in the presence of 0.1 ng/mL of recombinant mouse TNF $\alpha$ .