

# Rat TNFR1 / CD120a / TNFRSF1A Protein (His Tag)

Catalog Number: 80181-R08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

TNFRSF1A

### Protein Construction:

A DNA sequence encoding the rat TNFRSF1A (NP\_037223.1)(Met1-Ala211) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Rat

**Expression Host:** HEK293 Cells

## QC Testing

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

### Endotoxin:

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

**Predicted N terminal:** Ile 22

### Molecular Mass:

The recombinant rat TNFRSF1A comprises 201 amino acids and predicts a molecular mass of 22.3 kDa. The apparent molecular mass of the recombinant protein is approximately 33-38 kDa in SDS-PAGE under reducing conditions due to glycosylation.

### 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

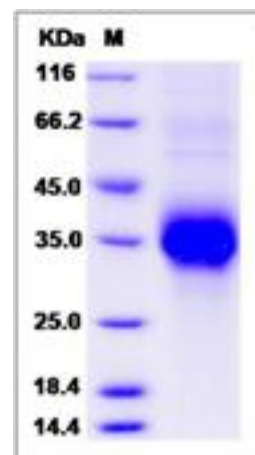
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 32 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD120a (cluster of differentiation 120a), also known as TNFR1 / TNFRSF1A, is a member of CD family, tumor necrosis factor receptor superfamily. CD120a is one of the most primary receptors for the tumor necrosis factor- $\alpha$ . It has been shown to be localized to both plasma membrane lipid rafts and the trans golgi complex with the help of the death domain (DD). CD120a can activate the transcription factor NF- $\kappa$ B, mediate apoptosis, and regulate inflammation processes.

## References

1. Zola H, et al. (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
2. Ho IC, et al. (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
3. Matesanz-Isabel J, et al. (2011) New B-cell CD molecules. Immunology Letters. 134 (2): 104-12.

**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

**Tel: +86-400-890-9989 (Global), +1-215-583-7898 (USA), +49(0)6196 9678656 (Europe)**

**Website: <http://www.sinobiological.com>**