

Recombinant Human TNFRSF1A/TNF-R1/CD120a Protein

Catalog No.: RP01412 **Recombinant**

Sequence Information

Species Human **Gene ID** 7132 **Swiss Prot** P19438-1

Tags

C-hFc

Synonyms

TNFRSF1A;CD120a;FPF;TBP1;TNF-R;TNF-R-I;TNF-R55;TNFAR;TNFR1;TNFR55;TNFR60;p55;p55-R;p60

Background

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 320 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 (cluste 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- κ B, mediate apoptosis, and regulate inflammation processes.

Product Information

Source HEK293 cells **Purification** $\geq 90\%$ as determined by SDS-PAGE.

Calculated MW 46.45 kDa **Observed MW** 55-65 kDa

Endotoxin
 $< 1\text{ EU}/\mu\text{g}$ of the protein by LAL method.

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 stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Basic Information

Description

Recombinant Human TNFRSF1A/TNF-R1/CD120a Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu30-Thr211) of human CD120a/TNFRSF1A (Accession #NP_001056.1) fused with a hFc tag at the C-terminus.

Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Mouse TNF α at 2 $\mu\text{g}/\text{mL}$ (100 $\mu\text{L}/\text{well}$) can bind Human TNFRSF1A with a linear range of 4-53 ng/mL. 2. Measured by its ability to inhibit TNF- α mediated cytotoxicity in L-929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is typically 14-57 ng/mL in the presence of 0.25 ng/mL recombinant human TNF- α .

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. 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.

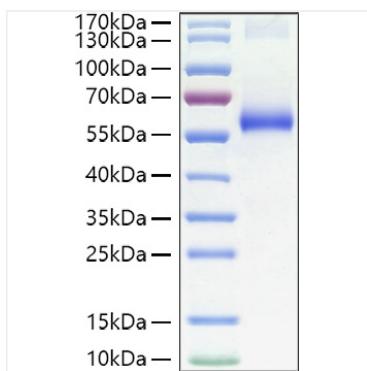
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

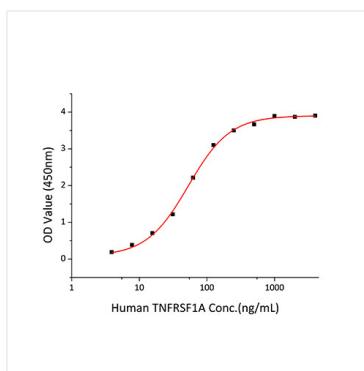
Contact

	400-999-6126
	cn.market@abclonal.com.cn
	www.abclonal.com.cn

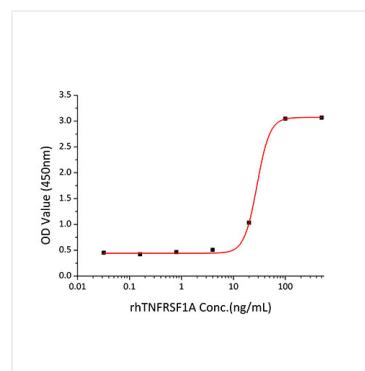
Validation Data



Recombinant Human TNFRSF1A/TNF-R1/CD120a Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Mouse TNF α at 2 μ g/mL (100 μ L/well) can bind Human TNFRSF1A with a linear range of 4-53 ng/mL.



Recombinant Human TNFRSF1A inhibit TNF- α mediated cytotoxicity in L-929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is typically 14-57 ng/mL in the presence of 0.25 ng/mL recombinant human TNF- α .