For Research Use Only

Recombinant Human TNFR1/CD120a protein (His Tag)

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Catalog Number: Eg0531

Basic Information

Species:
Human

Purity:
>95 %, SDS-PAGE

Tag:
His Tag

EC50:
0.8-3.2 ng/mL

Technical Specifications

Purity:
>95 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Human TNFR1 protein Ile22-Thr211 (Accession# P19438-1) with a His tag at the C-terminus.

GeneID:
7132

Accession:
P19438-1

Predicted Molecular Mass:
22.1 kDa

SDS-PAGE:
32-48 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human TNFR1 (His tag) at 0.2 μg/mL (100 μL/well) can bind Human TNF alpha (GST tag) with a linear range of 0.8-3.2 ng/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

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

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Tumor necrosis factor (TNF) is a multifunctional cytokine that plays a key role in regulating inflammation, immune functions, host defense, and apoptosis. TNF signals through two distinct cell surface receptors, TNFR1 (TNFRSF1A, CD120a) and TNFR2 (TNFRSF1B, CD120b). TNFR1, which contains a death domain (DD) within its intracytoplasmic region, is thought to be the key receptor for TNF signaling. This receptor can be released to the extracellular space by two mechanisms, ectodomain shedding and constitutive release of full-length 55 kDa TNFR1. Soluble TNFR1 (sTNFR1) could function as TNF-binding protein, inhibiting TNF bioactivity.

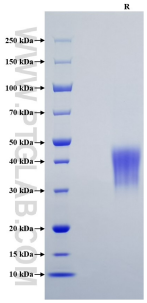
References

1. Islam A, et al. (2006). J Biol Chem. 281(10):6860-73.
2. Aggarwal BB, et al. (2012). Blood. 119(3):651-65.
3. Aderka D , et al. (2012). J Exp Med. 175(2):323-9.

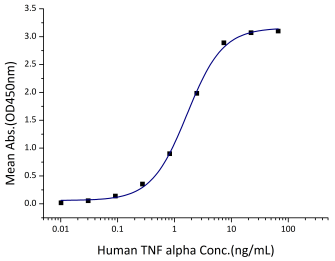
Synonyms

CD120a, TNFR1, TNFRSF1A, FPF, p55

Selected Validation Data



Purity of Recombinant Human TNFR1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



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