Data Sheet (Cat.No.TMPY-07042)

TargetMol

TNFR1/CD120a/TNFRSF1A Protein, Human, Recombinant (Avi & His), Biotinylated

General Information

Synonyms:	TNFAR;CD120a;TNFR55;TBP1;FPF;p55-R;TNFR1;TNF-R55;TNF-R-I;p55;p60;TNFR60;TNF-R
Protein Construction:	A DNA sequence encoding the Human TNFRSF1A (NP_001056.1) (Met1-Thr211) was expressed with a c-terminal polyhistidine tagged AVI tag at the C-terminus. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P19438-1
Molecular Weight:	24.5 kDa (predicted); 40.3 kDa (reducing contition)

QC Testing

Biological Activity:	Immobilized TNF-alpha Protein, Human, Recombinant (Cat#TMPY-00936) at 2 μg/mL (100 μl/well) can bind TNFR1/CD120a/TNFRSF1A Protein, Human, Recombinant (Avi & His), Biotinylated (Cat#TMPY-07042), the EC50 is 2-6 ng/mL.
Purity:	≥ 95% as determined by SDS-PAGE. ≥ 95% as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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-κB, mediate apoptosis, and regulate inflammation processes.