Recombinant Rat TNFR1/TNFRSF1A Protein (Fc Tag)

Catalog Number: PKSR030339

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Rat
Source	HEK293 Cells-derived Rat TNFR1/TNFRSF1A protein Met1-Ala211, with an C-
	terminal hFc
Calculated MW	47.9 kDa
Observed MW	59 kDa
Accession	P22934
Bio-activity	1. Measured by its ability to inhibit $TNF\alpha$ -mediated cytotoxicity in L-929 mouse
	fibroblast cells in the presence of metabolic inhibitor actinomycin D. The ED_{50} for this effect is typically 3-30 ng/mL in the presence of 0.05 ng/mL of ratTNF α . 2. Immobilized mouse TNFa (80-235) at 10 µg/ml (100 µl/well) can bind rat TNFRSF1A-
	Fc, The EC ₅₀ of rat TNFRSF1A-Fc is 0.08-0.20 μ g/ml.
Properties	
Purity	>90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
	KDa M
	116
	66.2
	45.0

18.4 14.4

> 90 % as determined by reducing SDS-PAGE.

Background

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The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. 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.