Recombinant Rat TNFSF7/CD70 Protein (His Tag)

Catalog Number: PKSR030431

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

Description	
Species	Rat
Source	HEK293 Cells-derived Rat TNFSF7/CD70 protein Gln46-Pro195, with an N-terminal His
Calculated MW	18.9 kDa
Observed MW	28 kDa
Accession	NP_001100348
Bio-activity	Immobilized rat His-CD70 at $10\mu g/mL$ ($100\mu L/well$) can bind mouse CD27-Fch, the
	EC ₅₀ of mouse CD27-Fch is 10-50ng/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.
	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
	35.0
	25.0
	18.4 14.4

> 90 % as determined by reducing SDS-PAGE.

Background

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CD70, a member of the tumor necrosis factor superfamily, is restricted to activated T-and B-lymphocytes and mature dendritic cells. Binding of CD70 to its receptor, CD27, is important in priming, effector functions, differentiation and memory formation of T-cells as well as plasma and memory B-cell generation. Tight control of CD70 expression is required to prevent lethal immunodeficiency. By selective transcription, CD70 is largely confined to activated lymphocytes and dendritic cells (DC). As a type II transmembrane receptor, CD70 is normally expressed on a subset of B, T and NK cells, where it plays a costimulatory role in immune cell activation. Immunohistochemical analysis of CD70 expression in multiple carcinoma types. The restricted expression pattern of CD70 in normal tissues and its widespread expression in various malignancies makes it an attractive target for antibody-based therapeutics. Investigations to exploit CD70 as a cancer target have lead to the identification of potential antibody-based clinical candidates.