Active Recombinant Canine TNFRSF9 Protein, Fc-tagged

Cat. No. TNFRSF9-10979C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Canine 4-1BB Protein, Fc Tag is expressed from human 293 cells (HEK293). It contains AA Ile 24 - Ser 185 (Accession # XP_850336.1). This protein carries a human IgG1 Fc tag at the C-terminus. Predicted N-terminus: Ile 24
Species	Canine
Source	HEK293
ProteinLength	24-185 aa
Description	4-1BB is also known as CD137, tumor necrosis factor receptor superfamily member 9 (TNFRSF9), induced by lymphocyte activation (ILA), is a co-stimulatory molecule of the tumor necrosis factor (TNF) receptor superfamily. CD137 can be expressed by activated T cells, but to a larger extent on CD8 than on CD4 T cells. In addition, CD137 expression is found on dendritic cells, follicular dendritic cells, natural killer cells, granulocytes and cells of blood vessel walls at sites of inflammation. The best characterized activity of CD137 is its costimulatory activity for activated T cells. Crosslinking of CD137 enhances T cell proliferation, IL-2 secretion survival and cytolytic activity. Further, it can enhance immune activity to eliminate tumors in mice. CD137 can enhance activation-induced T cell apoptosis when triggered by engagement of the TCR/CD3 complex. In addition, 4-1BB/4-1BBL co-stimulatory pathway has been shown to augment secondary CTL responses to several viruses, and meanwhile augment anti-tumor immunity. 4-1BB thus is a promising candidate for immunotherapy of human cancer. CD137 has been shown to interact with TRAF2.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.
Bio-activity	Immobilized Human 4-1BB Ligand, Mouse IgG2a Fc Tag, low endotoxin at 5 μg/mL (100 μL/well) can bind Canine 4-1BB Protein, Fc Tag with a linear range of 0.3-5 ng/mL.
Molecular Mass	The protein has a calculated MW of 43.4 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU/μg by the LAL method/rFC method.
Purity	>95% as determined by SDS-PAGE. >95% as determined by SEC-MALS.
Storage	This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 μg/μL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	TNFRSF9 TNF receptor superfamily member 9 [Canis lupus familiaris (dog)]
Official Symbol	TNFRSF9
Synonyms	TNFRSF9; TNF receptor superfamily member 9; tumor necrosis factor receptor superfamily member 9

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	608274
mRNA Refseq	XM_038666597
Protein Refseq	XP_038522525
UniProt ID	A0A8I3QDG0

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA