Data Sheet (Cat.No.TMPY-04493)

TargetMol

BCMA/TNFRSF17 Protein, Human, Recombinant (rFc)

General Information

Synonyms:	tumor necrosis factor receptor superfamily member 17;BCMA;CD269;TNFRSF13A;BCM
Protein Construction:	A DNA sequence encoding the human TNFRSF17 (NP_001183.2) (Met1-Ala54) was expressed with the Fc region of rabbit IgG at the N-terminus. Predicted N terminal: Ser
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q02223-1
Molecular Weight:	33.3 kDa (predicted); 33-44 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized TNFRSF17 can bind Fc-BAFF/Biotin , the EC50 of Fc-BAFF/Biotin is 1.0-10.0 ng/mL.
Purity:	≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, pH8.0.Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

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

Tumor necrosis factor receptor superfamily, member 17 (TNFRSF17), also known as B cell maturation antigen (BCMA) or CD269 antigen, is a member of the TNF-receptor superfamily. This receptor is preferentially expressed in mature B lymphocytes, and may be important for B cell development and autoimmune response. This receptor has been shown to specifically bind to the tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13BBAFF), and to lead to NF-kappaB and MAPK8/JNK activation. TNFRSF17/BCMA/CD269 also binds to various TRAF family

members, and thus may transduce signals for cell survival and proliferation. TNFRSF17/BCMA/CD269 is a receptor for TALL-1 and BCMA activates NF-kappaB through a TRAF5-, TRAF6-, NIK-, and IKK-dependent pathway. The identification of TNFRSF17 as a NF-kappaB-activating receptor for TALL-1 suggests molecular targets for drug development against certain immunodeficient or autoimmune diseases. TNFRSF17/BCMA is a target of donor B-cell immunity in patients with myeloma who respond to DLI. Antibody responses to cell-surface BCMA may contribute directly to tumor rejection in vivo.

Reference

Novak AJ,et al.(2004) Expression of BCMA, TACI, and BAFF-R in multiple myeloma: a mechanism for growth and survival. Blood. 103 (2): 689-94.

O'Connor BP,et al.(2004) BCMA is essential for the survival of long-lived bone marrow plasma cells. J Exp Med. 199 (1): 91-8.

Moser K,et al.(2006) Stromal niches, plasma cell differentiation and survival. Curr Opin Immunol. 18(3): 265-70.