Data Sheet (Cat.No.TMPY-04289)

TargetMol

CD30L Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms:	tumor necrosis factor (ligand) superfamily, member 8
Protein Construction:	A DNA sequence encoding the cynomolgus TNFSF8 (G7P2F1) (Gln63-Asp234) was expressed with a polyhistide tag at the N-terminus. Predicted N terminal: His
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	G7P2F1
Molecular Weight:	22 kDa (predicted); 38 kDa (reducing conditions)

QC Testing

Biological Activity:	Immobilized Cynomolgus His-TNFSF8 at 10 μg/ml (100 μl/well) can bind biotinylated human CD30-Fch , The EC50 of biotinylated human CD30-Fch is 2.7-6.2 ng/ml.
Purity:	> 95 % as determined by SDS-PAGE
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 PBS, pH 7.4. 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

CD30 ligand (CD30L), also known as CD153 and TNFSF8, is a membrane-associated glycoprotein belonging to the TNF superfamily and TNFR superfamily, and is a specific ligand for CD30/TNFRSF8 originally described as a cell surface antigen and a marker for Hodgkin lymphoma and related hematologic malignancies. CD30L is a type-II membrane glycoprotein expressed on activated T cells, stimulated monocyte-macrophages, granulocytes, eosinophils, and some Burkitt-like lymphoma cell lines. CD30L is capable of transducing signals through CD30 on

different CD30+ lymphoma cell lines, and mediates pleiotropic biologic effects including cell proliferation, activation, differentiation, as well as cell death by apoptosis. CD30-CD30 ligand interaction has been suggested to have a pathophysiologic role in malignant lymphomas, particularly Hodgkin disease, large cell anaplastic lymphomas and Burkitt lymphomas, and is also involved in activation and functioning of the T cell-dependent immune response. Thus, CD153 and its receptor CD30 are regarded as therapeutic targets in hematologic malignancies, autoimmune and inflammatory diseases.

Reference

Hargreaves PG, et al. (2002) Soluble CD30 binds to CD153 with high affinity and blocks transmembrane signaling by CD30. Eur J Immunol. 32(1): 163-73.

Blazar BR, et al. (2004) CD30/CD30 ligand (CD153) interaction regulates CD4+ T cell-mediated graft-versus-host disease. J Immunol. 173(5): 2933-41.

Oflazoglu E, et al. (2009) Targeting CD30/CD30L in oncology and autoimmune and inflammatory diseases. Adv Exp Med Biol. 647: 174-85.