Data Sheet (Cat.No.TMPY-00072)

TargetMol

GITR/TNFRSF18 Protein, Human, Recombinant (His)

General Information

Synonyms:	AITR;GITR-D;tumor necrosis factor receptor superfamily, member 18;CD357;GITR
Protein Construction:	A DNA sequence encoding the human TNFRSF18 (NP_683700.1) (Met1-Glu161) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Gln 26
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9Y5U5-3
Molecular Weight:	16 kDa (predicted); 25.44 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized TNFRSF18-His at 10 μg/mL (100 μL/well) can bind TNFSF18-mFc , the EC50 of TNFSF18-mFc is 20-60 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

GITR, also known as TNFRSF18(CD357), belongs to the tumor necrosis factor receptor (TNF-R) superfamily. It is the receptor for TNFSF18. GITR plays a key role in dominant immunological self-tolerance maintained by CD25(+)CD4(+) regulatory T cells. GITR may be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. GITR and its ligand are important costimulatory molecules in the pathogenesis of autoimmune diseases. It also mediates NF-kappa-B activation via the TRAF2/NIK

pathway.Cancer ImmunotherapyCo-stimulatory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint Detection: ELISA AntibodiesImmune Checkpoint TargetsImmunotherapyTargeted Therapy

Reference

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Nocentini G,et al. (1997) A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor-induced apoptosis. Proc Natl Acad Sci. 94(12): 6216-21.

Baltz KM,et al. (2007) Cancer immunoediting by GITR (glucocorticoid-induced TNF-related protein) ligand in humans: NK cell/tumor cell interactions. FASEB J. 21(10):2442-54.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481