Data Sheet (Cat.No.TMPY-05602)

GITR/TNFRSF18 Protein, Human, Recombinant (hFc & Avi), Biotinylated

General Information

Synonyms:	AITR;GITR;tumor necrosis factor receptor superfamily, member 18;CD357;GITR-D
Protein Construction:	A DNA sequence encoding the human TNFRSF18 (NP_683700.1) (Met1-Glu161) was expressed with a C-terminal Fc region of human IgG1 tag followed by an AVI tag. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed. Predicted N terminal: Gln 26
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9Y5U5-3
Molecular Weight:	43.1 kDa (predicted)

QC Testing

Biological Activity:	Immobilized Recombinant Human TNFSF18 Protein (His Tag) (Cat#TMPY-05292) at 2 μg/mL (100 μL/well) can bind Recombinant Human GITR Protein (Fc & Avi Tag), Biotinylated (Cat#TMPY-05602), the EC50 is 1.5-4.5 ng/mL(QC tested).
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:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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

Kwon B,et al. (1999) Identification of a novel activation-inducible protein of the tumor necrosis factor receptor superfamily and its ligand. J Biol Chem. 274(10):6056-61.

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