Data Sheet (Cat.No.TMPY-05155)

TargetMol

GITR/TNFRSF18 Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms: tumor necrosis factor receptor superfamily, member 18

Protein Construction: A DNA sequence encoding the Cynomolgus TNFRSF18 (XP_005545180.1) (Met1-Glu155) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Gln 20

Species: Cynomolgus

Expression Host: HEK293 Cells

Accession: XP_005545180.1

Molecular Weight: 16.1 kDa (predicted)

QC Testing

Biological Activity: Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

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.