

Technical Data Sheet

Biotinylated Human GITR (TNFRSF18) (C-His-Avi)

Catalog Number: 811303, 811304

Size: 25 ug, 100 ug

Target Name: TNFRSF18, AITR, GITR, CD357

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: Human

Sources: Recombinant Human Human GITR/TNFRSF18 (Gln26-Glu161) with C-terminus His-Avi-tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

Accession Number: Q9Y5U5

Molecular Weight: The protein has a predicted molecular weight of 18.1 kDa. Under DTT-reducing conditions, it migrates at approximately 25 kDa on SDS-PAGE.

Affinity Tag: C-His-Avi

Purity: >95% based on SDS-PAGE under reducing condition

Formulation: 1xPBS buffer, pH7.4, 0.22 µm filtered

Endotoxin level: Less than 0.1 EU/µg protein as determined by the LAL method

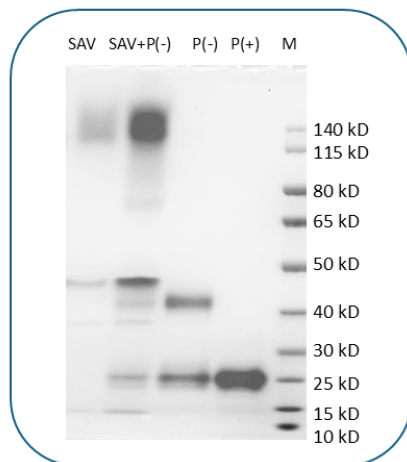
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

Background Information

GITR (glucocorticoid-induced TNFR-related protein), also known as TNFRSF18 or CD357, is a 25 kD member of the TNF receptor superfamily that acts as the receptor for TNFSF18 (GITRL). It is primarily expressed on activated T cells and regulatory T cells and is upregulated upon T cell receptor engagement. GITR plays a key role in immune regulation by influencing T cell proliferation, TCR-mediated apoptosis, and the function of regulatory T cells, thereby contributing to the maintenance of self-tolerance. GITR signaling activates NF- κ B via the TRAF2/NIK pathway and interacts with TRAF1–3. It is also implicated in T cell–endothelial cell interactions and the pathogenesis of autoimmune diseases.

Product Data



Human GITR (TNFRSF18) Protein (C-His-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P-) conditions shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the GITR protein exceeds 80%.