

## GITR Ligand Fc Chimera, Human

Catalog # PVGS1948

## **Product Information**

**Primary Accession 09UNG2 Species** Human

Sequence Glu74-Ser199

> 95% as analyzed by SDS-PAGE **Purity** 

**Endotoxin Level** 

**Biological Activity** Immobilized GITR, hFc, Human (Cat. No.: Z03440) at 5.0 ☐g/ml (100 ☐/well)

can bind human biotinylated GITR Ligand, hFc, Human when detected by

Streptavidin-HRP.

**HEK 293 Expression System** 

**Formulation** Reconstitution

Lyophilized from a 0.2 Im filtered solution in PBS, 5% trehalose and mannitol. It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 □g/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

## **Additional Information**

8995 Gene ID

**Other Names** Tumor necrosis factor ligand superfamily member 18, Activation-inducible

TNF-related ligand, AITRL, Glucocorticoid-induced TNF-related ligand, hGITRL,

TNFSF18 (HGNC:11932), AITRL, GITRL, TL6

GITR Ligand, also known as TNFSF18 and TL6, is an approximately 30 kDa type **Target Background** 

II transmembrane glycoprotein in the TNF superfamily (1). Human GITR

Ligand consists of a 50 amino acid cytoplasmic domain, a 21 aa

transsmembrane segment, and a 128 aa extracellular domain (ECD). Within the ECD, human GITR Ligand shares 56% and 60% aa sequence identity with mouse and rat GITR Ligand, respectively. TNFSF18 is expressed at high levels

in the small intestine, ovary, testis, kidney and endothelial cells. GITRL/TNFSF18 is up-regulated after stimulation by bacterial

lipopolysaccharides (LPS). TNFSF18 Can function as costimulator and lower

the threshold for T-cell activation and T-cell proliferation. TNFSF18 / GITR Ligand is important for interactions between activated T-lymphocytes and endothelial cells.Recombinant Human GITR Ligand Fc Chimera produced in HEK293 cells is a polypeptide chain containing 359 amino acids with the C-termimal human IgG1 Fc fragment. A fully biologically active molecule, rhGITRL has a molecular mass of 50 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

## **Protein Information**

Name TNFSF18 ( HGNC:11932)

Synonyms AITRL, GITRL, TL6

**Function** Cytokine that binds to TNFRSF18/AITR/GITR. Regulates T-cell responses. Can

function as costimulator and lower the threshold for T- cell activation and

T-cell proliferation. Important for interactions between activated

T-lymphocytes and endothelial cells. Mediates activation of NF-kappa-B. Triggers increased phosphorylation of STAT1 and up-regulates expression of VCAM1 and ICAM1 (PubMed: 23892569). Promotes leukocyte adhesion to endothelial cells (PubMed: 23892569). Regulates migration of monocytes from

the splenic reservoir to sites of inflammation (By similarity).

**Cellular Location** Cell membrane; Single-pass type II membrane protein

**Tissue Location** Expressed at high levels in the small intestine, ovary, testis, kidney and

endothelial cells

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