

AITRL

Catalog # PVGS1282

Product Information

Primary Accession Q9UNG2 Species Human

Sequence Glu52-Ile176, expressed with an N-terminal Met

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level

Expression System E. coli

Formulation Lyophilized after extensive dialysis against 50 mM Tris, pH 8.0.

ReconstitutionIt is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH₂O 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

Gene ID 8995

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

Target Background Activation-Inducible TNF-Related Ligand (AITRL), also known as

Glucocorticoid-Induced TNF-Related Ligand (GITRL), belongs to the tumor necrosis factor superfamily (TNFSF). AITRL is a Type II single transmembrane protein and shares low conservation within the extracellular domain with other TNFSF members. AITRL is expressed on macrophages, immature and mature dendritic cells and B cells. Its receptor, Activation-Inducible TNFR family Receptor (AITR), is expressed on T lymphocytes, natural killer (NK) cells, and antigen-presenting cells. Upon binding by AITRL, AITR can be released. AITR activation increases resistance to tumors and viral infections and is involved in autoimmune and inflammatory processes. In addition, activated AITR increases TCR-induced T cell proliferation and cytokine production and rescues T cells and NK cells from apoptosis.

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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