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# AITRL

Catalog # PVGS1282

## Product Information

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| **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. |
| **Reconstitution** | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in $ddH_2O$ 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

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| **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

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| **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 |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.