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AITRL

Catalog # PVGS1307

Product Information

Primary Accession	Q7TS55
Species	Mouse
Sequence	Thr47-Ser173
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	
Expression System	E. coli
Formulation	Lyophilized after extensive dialysis against PBS.
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

Gene ID	240873
Other Names	Tumor necrosis factor ligand superfamily member 18, GITR ligand, GITRL, Glucocorticoid-induced TNF-related ligand, Tnfsf18, Gitrl
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. After 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
Synonyms	Gitrl
Function	Cytokine that binds to TNFRSF18/AITR/GITR (PubMed: 14521928, PubMed:14647196). Regulates T-cell responses (PubMed:14647196). Can function as costimulator and lower the threshold for T-cell activation and T-cell proliferation (PubMed:14608036, PubMed:15128759). Important for interactions between activated T-lymphocytes and endothelial cells. Mediates activation of NF-kappa-B (PubMed:14521928, PubMed:14647196, PubMed:18178614). Triggers increased phosphorylation of STAT1 and up-regulates expression of VCAM1 and ICAM1 (By similarity). Promotes leukocyte adhesion to endothelial cells (PubMed:23892569). Regulates migration of monocytes from the splenic reservoir to sites of inflammation (PubMed:24107315).
Cellular Location	Cell membrane; Single-pass type II membrane protein
Tissue Location	Detected in immature and mature dendritic cells and in macrophages (at protein level). Detected in spleen, lung, heart, thymus, monocytes, macrophages, B-cells and dendritic cells

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