

## Activation-inducible TNF-related Ligand (AITRL), Human

**Cat.no.** PK0134

**Product size:** 10ug 50ug 1mg

**Source:** E. coli

**Species:** Human

**Biological Activity:** ED50 < 5 ng/mL, measured by the amount of Interleukin-8 produced by PMBC, corresponding to a specific activity of > 2.0 × 10<sup>5</sup> units/mg.

**Molecular Weight:** 14.3 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against 50 mM Tris, pH8.0.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant human Activation-Inducible TNF-Related Ligand (rhAITRL) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhAITRL remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

**Description:** 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. Recombinant human Activation-Inducible TNF-Related Ligand (rhAITRL) produced in E. coli is a single non-glycosylated polypeptide chain containing 126 amino acids.

**Amino Acid Sequence:**

00001 METAKEPCMA KFGPLPSKWQ MASSEPPCVN KVSDWKLEIL  
00041 QNGLYLIYGQ VAPNANYNDV APFEVRLYKN KDMIQTLTNK  
00081 SKIQNVGGTY ELHVGDTIDL IFNSEHQVLK NNTYWGILL  
00121 ANPQFI

**Synonyms:** Tumor necrosis factor ligand superfamily member 18, Activation-inducible TNF-related ligand, AITRL, Glucocorticoid-induced TNF-related ligand, hGITRL, TNFSF18, AITRL, GITRL, TL6, UNQ149/PRO175

**Note:** For research use only, not for use in diagnostic procedure.