

Product Data:**Product SKU:** RPES0276**Size:** 100µg**Species:** Human**Expression host:** E. coli**Uniprot:** NP_776214.1**Protein Information:****Molecular Mass:** 17.3 kDa**AP Molecular Mass:** 17.3 kDa**Tag:****Bio-activity:** 1. Measured by its binding ability in a functional ELISA. Immobilized human IL1RA at 10 µg/ml (100 µl/well) can bind human IL1R2-Fc, The EC50 of human IL1R2-Fc is 0.04-0.1 µg/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized human IL1RA at 10 µg/ml (100 µl/well) can bind human IL1R1-Fc, The EC50 of human IL1R1-Fc is 0.08-0.2 µg/mL. 3. Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells in the presence of 250pg/mL IL1a. The EC50 for this effect is typically 32 ng/mL.**Purity:** > 97 % as determined by reducing SDS-PAGE.**Endotoxin:** Please contact us for more information.**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.**Formulation:** Lyophilized from sterile PBS, pH 7.4**Reconstitution:** Please refer to the printed manual for detailed information.**Application:** Functional ELISA**Synonyms:** Interleukin Receptor Antagonist Protein; ILRN; ILra; IRAP; ICILRA; IL1 Inhibitor; Anakinra; IL1RN; IL1F3; IL1RA

Immunogen Information:

Sequence: Arg 26-Glu 177

Background:

Interleukin receptor antagonist (ILRA) also known as IL1RN is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1, alpha (IL1A) and interleukin 1, beta (IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses. A polymorphism of this protein encoding gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. ILRA/IL1RN may inhibit the activity of IL by binding to its receptor and it has no IL like activity. Genetic variation in ILRA/IL1RN is associated with susceptibility to microvascular complications of diabetes type 4 (MVCD4). These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. Defects in ILRA/IL1RN are the cause of interleukin 1 receptor antagonist deficiency (DIRA) which is also known as deficiency of interleukin 1 receptor antagonist. Autoinflammatory diseases manifest inflammation without evidence of infection, high-titer autoantibodies, or autoreactive T-cells. DIRA is a rare, autosomal recessive, genetic autoinflammatory disease that results in sterile multifocal osteomyelitis, and pustulosis from birth.