

## **Product datasheet for AP20672PU-N**

### OriGene Technologies, Inc.

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# **IL5RA Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC

Recommended Dilution: Western Blot: 1/500~1/1000.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 50-100 of Human IL-5Rα.

**Specificity:** This antibody detects endogenous levels of IL-5Ralpha protein.

(region surrounding Lys68)

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 48 kDa

**Gene Name:** interleukin 5 receptor subunit alpha

**Database Link:** Entrez Gene 3568 Human

Q01344





Background:

Interleukin 5 (IL-5) is a soluble T cell-derived factor, also known as T cellreplacing factor (TRF), that induces B cell and eosinophil growth and differentiation. IL-5 exerts its biological activity through the IL-5 receptor (IL-5R), which is composed of two chains: an alpha chain that binds IL-5 with low affinity and a beta chain that does not bind IL-5, but together with the IL-5 alpha chain, constitutes the high affinity IL-5 receptor. The cytoplasmic domain of both the alpha and beta chains is essential for signal transduction. Specifically, the membraneproximal proline-rich sequence of the cytoplasmic domain of the IL-5R receptor alpha subunit, IL-5Ralpha, is critical for the IL-5 induced proliferative response, expression of nuclear protooncogenes and tyrosine phosphorylation of cellular proteins, such as JAK1 and JAK2. Alternative splicing of the IL-5Ralpha gene produces several isoforms, including a membraneanchored isoform and a soluble isoform. The soluble isoform competes with IL-5 for binding to IL-5R and inhibits IL-5-mediated receptor activation and inflammatory mediator production, and, therefore, may be useful in treating asthma.

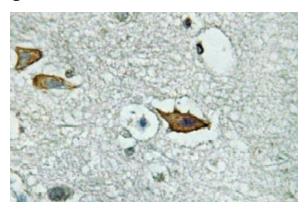
Synonyms: Interleukin-5 receptor subunit alpha, IL-5R-alpha, IL5 Receptor alpha

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling

pathway

## **Product images:**



Immunohistochemistry analysis of CD125 / IL5RA Antibody Cat.-No. AP20672PU-N in Paraffin-Embedded Human pancreas tissue.