

IL5RA Antibody / CD125 [clone 31I14] (FY12710)

Catalog No.	Formulation	Size
FY12710	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL **Bulk quote request Availability** 2-3 weeks **Species Reactivity** Human **Format** Liquid Recombinant Rabbit Monoclonal Clonality Isotype Rabbit IgG **Clone Name** 31114 **Purity** Affinity-chromatography **Buffer** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA. UniProt Q01344 Western Blot: 1:500-1:2000 **Applications**

Description

Limitations

IL5RA antibody detects interleukin 5 receptor alpha chain, also known as CD125, encoded by the IL5RA gene. IL5RA forms part of the receptor for interleukin 5, a cytokine that regulates eosinophil proliferation, differentiation, and survival. The receptor consists of a ligand specific alpha chain and a common beta chain shared with receptors for IL3 and GM CSF. Engagement of IL5 with IL5RA triggers JAK STAT and PI3K pathways that drive eosinophil activation and immune responses.

This IL5RA antibody is available for research use only.

IL5RA antibody is widely applied in immunology, allergy research, and hematology. Expression of IL5RA is restricted to eosinophils, basophils, and certain progenitor cells, making it a valuable marker of eosinophilic inflammation. By detecting IL5RA, researchers can evaluate eosinophil biology in conditions such as asthma, eosinophilic esophagitis, and hypereosinophilic syndromes.

The antibody is validated for flow cytometry, immunohistochemistry, and western blotting. Flow cytometry with IL5RA antibody distinguishes eosinophil populations in blood and tissue. Immunohistochemistry maps receptor expression in

inflamed airway or gastrointestinal biopsies, while western blotting confirms protein expression in hematopoietic samples. These techniques provide robust tools for studying IL5RA expression and signaling.

IL5RA is a therapeutic target in eosinophilic diseases. Monoclonal antibodies such as benralizumab target IL5RA to deplete eosinophils by antibody dependent cytotoxicity. By applying IL5RA antibody, researchers can monitor receptor levels, assess drug effects, and explore mechanisms of eosinophil regulation.

Beyond allergy and hematology, IL5RA contributes to host defense against parasites by supporting eosinophil mediated immunity. Dysregulation leads to pathological inflammation in chronic asthma and gastrointestinal disorders. IL5RA antibody therefore provides a critical reagent for understanding type 2 immune responses in health and disease.

IL5RA antibody from NSJ Bioreagents provides dependable specificity for studying interleukin 5 receptor alpha chain. Its performance across applications ensures accurate detection of CD125 in research and clinical contexts.

Application Notes

Optimal dilution of the IL5RA antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human CD125 was used as the immunogen for the IL5RA antibody.

Storage

Store the IL5RA antibody at -20oC.