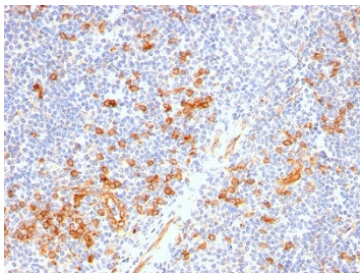
Recombinant CD123 Antibody IL3RA/2947R / Interleukin 3 Receptor Antibody [clone IL3RA/2947R] (V7426)

Catalog No.	Formulation	Size
V7426-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7426-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7426SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7426IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

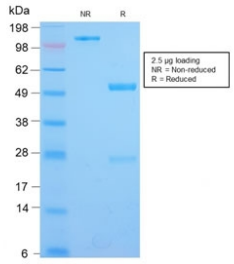
Recombinant RABBIT MONOCLONAL

Bulk quote request

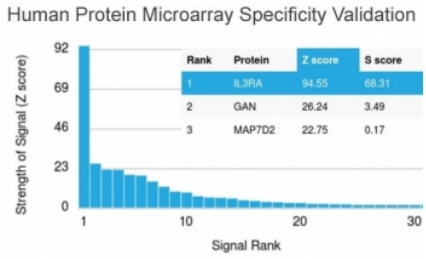
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	IL3RA/2947R
Purity	Protein A affinity chromatography
UniProt	P26951
Localization	Cell surface, Cytoplasmic
Applications	ELISA (order BSA/sodium azide-free format for coating) Immunohistochemistry (FFPE): 0.25-0.5ug/ml for 30 min at RT
Limitations	This Recombinant CD123 Antibody IL3RA/2947R / Interleukin 3 Receptor Antibody is available for research use only.



Recombinant CD123 Antibody IL3RA/2947R in Human Tonsil IHC. Immunohistochemistry of FFPE human tonsil tissue using Recombinant CD123 Antibody clone IL3RA/2947R demonstrates strong staining in a distinct subset of cells distributed throughout the lymphoid tissue, with prominent membranous and cytoplasmic signal against a largely negative lymphocyte background. HIER was performed by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9 for 10-20 min followed by cooling. The selective positive-cell distribution demonstrates detection of CD123 by this Interleukin 3 Receptor Antibody in human tonsil.



Recombinant CD123 Antibody IL3RA/2947R Purity by SDS-PAGE. SDS-PAGE analysis of 2.5 ug of purified, BSA-free Recombinant CD123 Antibody clone IL3RA/2947R demonstrates the intact immunoglobulin species above 98 kDa under non-reducing conditions. Under reducing conditions, the antibody resolves into prominent heavy- and light-chain bands at approximately 50 kDa and 25 kDa, respectively. The clean banding pattern with minimal additional protein staining supports the integrity and purity of this Interleukin 3 Receptor Antibody preparation.



Recombinant CD123 Antibody IL3RA/2947R Protein Microarray Validated. HuProt protein microarray analysis of Recombinant CD123 Antibody clone IL3RA/2947R against more than 19,000 full-length human proteins identifies IL3RA as the highest-ranking target, with a Z-score of 94.55 and an S-score of 68.31. The Z-score represents signal strength in standard deviations above the mean array signal, while the S-score measures separation between the intended target and the next highest-ranking protein. IL3RA is strongly separated from the remaining proteins, providing strong specificity evidence for this Interleukin 3 Receptor Antibody.

Description

Recombinant CD123 Antibody IL3RA/2947R recognizes CD123, the alpha subunit of the interleukin 3 receptor encoded by the IL3RA gene. CD123 is a type I transmembrane glycoprotein that binds IL-3 and contributes to regulation of hematopoietic cell survival, proliferation, and differentiation. The receptor is expressed among hematopoietic progenitors and multiple immune-cell populations, connecting IL-3 responsiveness with blood-cell development and immune regulation.

CD123 binds IL-3 with relatively low affinity when expressed alone. Association with the common beta subunit CSF2RB (CD131) produces the functional high-affinity IL-3 receptor complex. CSF2RB is shared with the receptor systems for GM-CSF and IL-5, linking these cytokines through a common signaling component. IL-3 receptor activation stimulates pathways including JAK-STAT, PI3K-AKT, and MAPKs, promoting changes in cellular survival, proliferation, and differentiation.

IL3RA expression is associated with hematopoietic progenitor cells and several myeloid and immune-cell populations. CD123 is also studied extensively in hematologic malignancies, including acute myeloid leukemia and certain other disorders involving abnormal hematopoietic cells. Its extracellular localization and role in cytokine responsiveness have made the receptor an important subject in research examining normal hematopoiesis, malignant cell populations, and therapeutic strategies directed toward cell-surface targets.

Clone IL3RA/2947R is a recombinant rabbit monoclonal antibody generated against recombinant human IL3RA protein. The antibody has also been evaluated on a HuProt protein microarray containing more than 19,000 full-length human proteins to assess target specificity. As an Interleukin 3 Receptor Antibody, clone IL3RA/2947R provides a sequence-defined monoclonal reagent for investigating CD123 and IL-3 receptor biology. NSJ Bioreagents supplies IL3RA/2947R for research use only. (nsjbio.com)

A Recombinant CD123 Antibody can be used to investigate IL3RA expression and molecular mechanisms connecting IL-3 receptor signaling, hematopoietic development, immune-cell regulation, and hematologic disease.

For a mouse monoclonal clone with broader IHC validation and exceptionally strong protein microarray target separation, see our CD123 Antibody IL3RA/1531 / IL3RA Monoclonal Antibody page.

Application Notes

Optimal dilution of the Recombinant CD123 Antibody IL3RA/2947R / Interleukin 3 Receptor Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A portion of amino acids 26-171 was used as the immunogen for the Recombinant CD123 Antibody IL3RA/2947R.

Storage

Store the Recombinant CD123 Antibody IL3RA/2947R at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD123 antibody, IL3RA antibody, IL-3RA antibody, IL3R alpha antibody, IL-3R alpha antibody, interleukin 3 receptor antibody, interleukin 3 receptor alpha antibody, interleukin-3 receptor alpha antibody, interleukin 3 receptor alpha chain antibody

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