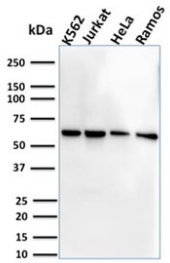
IL7R Antibody IL7R/2751 / CD127 Monoclonal Antibody [clone IL7R/2751] (V7294)

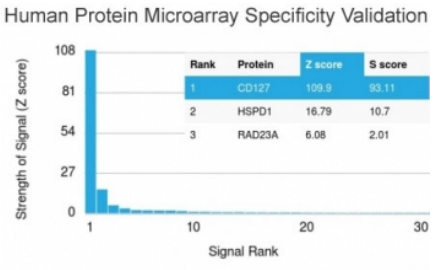
Catalog No.	Formulation	Size
V7294-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7294-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7294SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

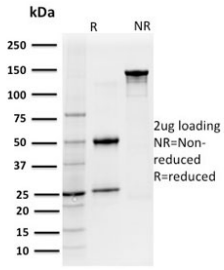
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	IL7R/2751
Purity	Protein G affinity chromatography
UniProt	P16871
Localization	Cell surface and cytoplasmic
Applications	ELISA : order BSA/sodium azide-free format for coating Western Blot : 1-2ug/ml
Limitations	This IL7R Antibody IL7R/2751 / CD127 Monoclonal Antibody is available for research use only.



IL7R Antibody IL7R/2751 Detects CD127 in Human Cell Lines WB. Western blot analysis of human cell lysates using IL7R Antibody (clone IL7R/2751) shows strong, discrete bands at approximately 55-60 kDa. Lane 1: K562 cells; lane 2: Jurkat T lymphocytes; lane 3: HeLa cervical cancer cells; lane 4: Ramos B lymphocytes. The closely aligned major bands across all four samples are consistent with detection of glycosylated IL7R/CD127. This CD127 Monoclonal Antibody produces a clean, predominantly single-band pattern with little visible background.



IL7R Antibody IL7R/2751 Protein Microarray Validated. HuProt protein microarray analysis of IL7R Antibody (clone IL7R/2751) against more than 19,000 full-length human proteins identifies CD127/IL7R as the dominant target, with a Z-score of 100.8 and S-score of 99.1. The Z-score represents signal strength in standard deviations above the array mean, while the S-score measures separation from the next-ranked protein. The exceptionally large separation from the secondary signals provides strong evidence of preferential IL7R recognition by this CD127 Monoclonal Antibody under the tested microarray conditions.



IL7R Antibody IL7R/2751 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free IL7R Antibody (clone IL7R/2751) shows the intact antibody migrating near 150 kDa under non-reducing conditions. Under reducing conditions, the expected immunoglobulin heavy and light chains are visible at approximately 50 kDa and 25 kDa, respectively. The observed migration pattern supports the integrity and purity of this CD127 Monoclonal Antibody preparation.

Description

IL7R Antibody IL7R/2751 recognizes the interleukin 7 receptor alpha chain, a type I transmembrane protein encoded by the IL7R gene and also known as IL7RA and CD127. IL7R is an important cytokine receptor component involved in lymphocyte development, survival, and homeostasis. The alpha chain associates with the common gamma chain, IL2RG/CD132, to form the functional receptor for interleukin 7 (IL-7), a cytokine with central roles in T-cell development and maintenance.

Binding of IL-7 to its receptor activates the receptor-associated kinases JAK1 and JAK3 and promotes downstream signaling through STAT proteins, particularly STAT5. IL7R signaling can additionally engage PI3K-AKT and other pathways involved in cellular survival, proliferation, differentiation, and metabolism. Through these mechanisms, IL-7 helps maintain lymphocyte populations and supports cellular processes required during immune development.

CD127 expression is closely associated with T-cell differentiation and changes according to cellular activation and developmental state. IL7R signaling contributes to the generation and maintenance of naive and memory T-cell populations and has broader functions in lymphoid development. CD127 is consequently an important cell-surface marker in immunology research and is frequently examined together with other markers when characterizing regulatory and conventional T-cell populations.

Clone IL7R/2751 is a mouse monoclonal antibody generated against a recombinant fragment corresponding to the extracellular domain of human IL7R. 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 a CD127 Monoclonal Antibody, clone IL7R/2751 provides a defined reagent for investigating IL7R and its relationship to cytokine signaling and lymphocyte biology. NSJ Bioreagents supplies IL7R/2751 for research use only.

An IL7R Antibody can be used to investigate CD127 expression and molecular mechanisms connecting IL-7 signaling, lymphocyte development, T-cell homeostasis, and adaptive immune responses.

For a CD127 antibody with broader Western blot, flow cytometry, and IHC validation, see our CD127 Antibody / Interleukin 7 Receptor Antibody page.

Application Notes

Optimal dilution of the IL7R Antibody IL7R/2751 / CD127 Monoclonal Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 21-236 from the human protein was used as the immunogen for the IL7R Antibody IL7R/2751.

Storage

Store the IL7R Antibody IL7R/2751 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

IL7R antibody, IL7RA antibody, CD127 antibody, interleukin 7 receptor antibody, interleukin-7 receptor antibody, interleukin 7 receptor alpha antibody, interleukin-7 receptor alpha antibody, IL-7R alpha antibody, IL7R alpha antibody

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