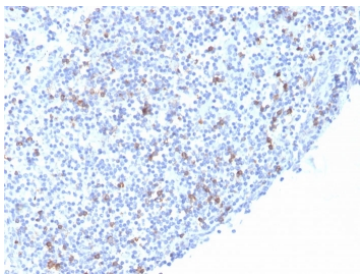
Integrin Alpha E Antibody rITGAE/2063 / Recombinant CD103 Antibody [clone rITGAE/2063] (V8433)

Catalog No.	Formulation	Size
V8433-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8433-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8433SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

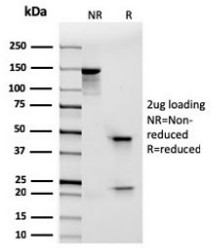
Recombinant MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rITGAE/2063
Purity	Protein G affinity chromatography
UniProt	P38570
Localization	Cell surface and cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This Integrin Alpha E Antibody rITGAE/2063 / Recombinant CD103 Antibody is available for research use only.



Integrin Alpha E Antibody rITGAE/2063 Staining in Human Tonsil by IHC. Immunohistochemistry of FFPE human tonsil tissue using Integrin Alpha E Antibody (clone rITGAE/2063) shows distinct brown staining in scattered lymphoid cells distributed throughout the tissue. Positive cells are interspersed among a dense population of hematoxylin-counterstained lymphocytes, producing a selective and heterogeneous cellular pattern consistent with CD103 expression in a subset of tonsillar lymphocytes. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9, 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing. This pattern demonstrates CD103 detection using this Recombinant CD103 Antibody.



Integrin Alpha E Antibody rITGAE/2063 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Integrin Alpha E Antibody (clone rITGAE/2063) with 2 ug loaded per lane shows the expected immunoglobulin migration profiles under non-reducing (NR) and reducing (R) conditions. The non-reduced antibody migrates predominantly as an intact species near 150 kDa, while reduction produces prominent heavy and light chain bands at approximately 50 kDa and 25 kDa, respectively. Minimal additional staining is visible, supporting the integrity and purity of this Recombinant CD103 Antibody preparation.

Description

Integrin Alpha E Antibody rITGAE/2063 recognizes integrin alpha E, a cell-surface adhesion protein encoded by the ITGAE gene and commonly known as CD103. Integrin alpha E associates with integrin beta 7 to form the alpha E beta 7 heterodimer, a member of the beta 7 integrin subfamily. This receptor is particularly associated with lymphocyte populations residing within epithelial and mucosal tissues. Through interaction with E-cadherin, alpha E beta 7 contributes to the adhesion and retention of selected immune cells within epithelial compartments, connecting integrin alpha E expression with tissue localization and immune surveillance.

CD103 is widely used as a marker of intraepithelial lymphocytes and subsets of tissue-resident memory T cells. These immune populations can remain positioned within peripheral tissues and participate in localized responses to infection, inflammation and other changes in the tissue environment. Integrin alpha E expression is influenced by local signaling factors, including transforming growth factor beta, and is consequently studied in relation to lymphocyte differentiation, tissue residency and mucosal immunity. A Recombinant CD103 Antibody can therefore support research into both immune cell phenotype and mechanisms governing lymphocyte localization.

Integrin alpha E is also relevant to hematologic and cancer research. CD103 is strongly associated with hairy cell leukemia and is frequently investigated as part of the characteristic immunophenotype of this malignancy. Expression may additionally occur in selected T-cell and other lymphoid neoplasms. In solid tumor research, CD103-positive tumor-infiltrating lymphocytes are studied as tissue-resident immune populations and for their interactions with epithelial tumor compartments. These applications have made ITGAE an important target in studies connecting immune phenotype, cellular adhesion and the tumor microenvironment.

Clone rITGAE/2063 is a recombinant mouse monoclonal antibody directed against human ITGAE. Its recombinant format provides a defined antibody sequence while retaining recognition of the CD103/integrin alpha E target. NSJ Bioreagents offers clone rITGAE/2063 for research involving tissue-resident lymphocytes, mucosal immunity and CD103-associated immune biology. An Integrin Alpha E Antibody can provide a useful reagent for investigating ITGAE expression and the distribution of CD103-positive immune cell populations.

For broader CD103 validation including protein microarray analysis, see our CD103 Antibody ITGAE/2063 / Integrin Alpha E Monoclonal Antibody page.

Application Notes

Optimal dilution of the Integrin Alpha E Antibody rITGAE/2063 / Recombinant CD103 Antibody should be determined by the researcher.

Immunogen

Recombinant human ITGAE partial protein was used as the immunogen for the recombinant Integrin Alpha E Antibody rITGAE/2063.

Storage

Store the Integrin Alpha E Antibody rITGAE/2063 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD103 antibody, ITGAE antibody, Integrin alpha E beta 7 antibody, alpha E integrin antibody, CD103 antigen antibody, HML-1 antigen antibody, Human mucosal lymphocyte antigen 1 antibody

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