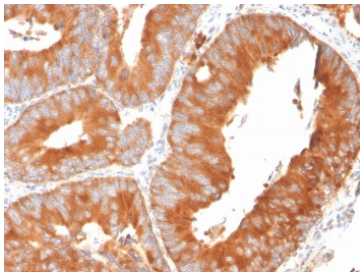
SLAMF7 Antibody / CS1 [clone SLAMF7/3649] (V8473)

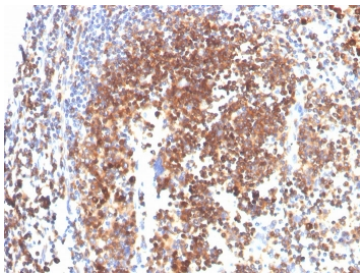
Catalog No.	Formulation	Size
V8473-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8473-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8473SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

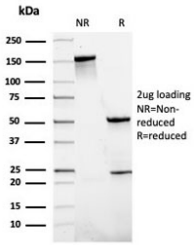
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SLAMF7/3649
Purity	Protein G affinity chromatography
UniProt	Q9NQ25
Localization	Cytoplasm, cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This SLAMF7 antibody is available for research use only.



Immunohistochemistry analysis of SLAMF7/CS1 antibody in human spleen tissue. Formalin-fixed, paraffin-embedded human spleen shows membranous and cytoplasmic brown staining in scattered lymphoid cells consistent with SLAMF7-positive immune cell populations. Background staining is minimal. Heat induced epitope retrieval was performed by boiling sections in pH 9 10mM Tris with 1mM EDTA buffer for 20 minutes followed by cooling prior to incubation with SLAMF7 antibody.



IHC staining of FFPE human tonsil with SLAMF7 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free SLAMF7 antibody as confirmation of integrity and purity.

Description

SLAMF7 antibody, also known as Signaling lymphocytic activation molecule family member 7 antibody, recognizes a cell surface immunoglobulin superfamily receptor commonly referred to as CS1 (CD2 subset 1) and CD319. The SLAMF7 gene encodes a type I transmembrane glycoprotein that is predominantly expressed on natural killer cells, subsets of activated T cells, mature dendritic cells, and plasma cells. Structurally, SLAMF7 contains extracellular immunoglobulin-like domains, a transmembrane region, and a cytoplasmic tail that mediates intracellular signaling through adaptor proteins such as EAT-2. This receptor is a member of the SLAM family of immune regulatory molecules and plays an important role in immune cell activation and cytotoxic responses.

Functionally, SLAMF7 is involved in modulating natural killer cell activation, antibody-dependent cellular cytotoxicity, and immune synapse formation. Engagement of SLAMF7 can enhance NK cell-mediated killing of target cells through homotypic interactions or antibody-mediated crosslinking. In plasma cells, including malignant plasma cells, SLAMF7 is consistently expressed at high levels, making it a valuable marker in hematopathology and oncology research. Because of its restricted expression pattern in normal tissues and strong expression in multiple myeloma and certain lymphoid malignancies, SLAMF7 antibody has become an important tool for studying tumor immunobiology and immune-based therapeutic strategies.

In normal lymphoid tissues such as spleen, tonsil, and lymph node, SLAMF7 expression is typically observed in subsets of lymphocytes, particularly NK cells and plasma cells, showing membranous staining patterns consistent with its surface localization. In malignant settings, strong membranous and sometimes cytoplasmic staining may be detected in plasma cell neoplasms and selected lymphomas. This expression profile aligns with transcriptomic and proteomic datasets demonstrating enrichment in hematopoietic lineages.

SLAMF7 antibody is suitable for detecting SLAMF7 expression in immunohistochemistry, western blot, and other research applications. Its utility spans studies of immune cell differentiation, tumor microenvironment analysis, and evaluation of therapeutic targets in hematologic malignancies. By enabling precise detection of SLAMF7, researchers can better characterize immune effector populations and investigate mechanisms underlying cytotoxic immune responses and plasma cell biology.

Application Notes

Optimal dilution of the SLAMF7 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 249-335 from the human protein was used as the immunogen for the SLAMF7 antibody.

Storage

Store the SLAMF7 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).