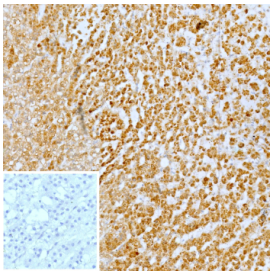
BLR1 Antibody / CXCR5 [clone CXCR5/13096] (V5994)

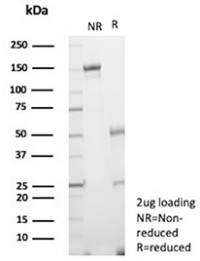
Catalog No.	Formulation	Size
V5994-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5994-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5994SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	CXCR5/13096
UniProt	P32302
Localization	Cell membrane
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This BLR1/CXCR5 antibody is available for research use only.



Immunohistochemistry analysis of BLR1 antibody in human adrenal gland tissue. FFPE human adrenal sections show strong HRP-DAB brown membranous and cytoplasmic staining in numerous immune-associated cells within the adrenal medulla, consistent with CXCR5, also known as CD185, expression in lymphoid cells. Adrenocortical cells demonstrate minimal background staining. The inset negative control, in which PBS was used in place of primary antibody, shows no specific brown chromogenic signal. Heat induced epitope retrieval was performed in 10 mM Tris with 1 mM EDTA, pH 9.0, by heating at 95oC for 45 minutes followed by cooling at room temperature for 20 minutes.



SDS-PAGE Analysis of Purified BLR1/CXCR5 antibody (clone CXCR5/13096). Confirmation of Purity and Integrity of Antibody.

Description

BLR1 antibody, also known as CXCR5 antibody, recognizes C-X-C motif chemokine receptor 5, a seven-transmembrane G protein-coupled receptor encoded by the CXCR5 gene and commonly referred to as CD185 and Burkitt lymphoma receptor 1. BLR1 is primarily localized to the plasma membrane of B lymphocytes and subsets of T cells, particularly follicular helper T cells, where it regulates chemokine-directed migration. As a member of the CXC chemokine receptor family, CXCR5 binds the chemokine CXCL13 and plays a central role in lymphoid follicle organization and germinal center formation.

BLR1 antibody detects a multi-pass transmembrane receptor composed of seven alpha-helical membrane-spanning domains, extracellular regions responsible for ligand binding, and intracellular domains that couple to heterotrimeric G proteins. Upon engagement with CXCL13, CXCR5 activates signaling pathways that promote cytoskeletal rearrangement and directed chemotaxis. Through these mechanisms, CD185 directs B cells and T follicular helper cells into B cell follicles within secondary lymphoid tissues, supporting antibody affinity maturation and adaptive immune responses.

Functionally, CXCR5 is essential for proper germinal center architecture and humoral immunity. Expression of BLR1 defines follicular B cells and T follicular helper cells and is widely used as a marker in immunophenotyping and lymphoid tissue studies. Dysregulated CXCR5 signaling has been implicated in autoimmune diseases, chronic inflammatory conditions, and lymphoid malignancies. In certain B cell lymphomas, altered BLR1 expression may influence tumor cell localization and interactions within the lymphoid microenvironment.

The CXCR5 gene is located on chromosome 11 and is transcriptionally regulated during lymphocyte activation and differentiation. Because BLR1 expression is largely restricted to defined immune cell subsets, detection of this receptor provides insight into lymphocyte trafficking, germinal center dynamics, and immune cell compartmentalization in normal and disease contexts.

The BLR1 antibody (clone CXCR5/13096) is suitable for detecting CXCR5 protein expression in research applications. This CXCR5 antibody supports investigation of B cell biology, T follicular helper cell function, lymphoid tissue organization, and immune-mediated disease mechanisms.

Application Notes

Optimal dilution of the BLR1/CXCR5 antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human CXCR5 protein (exact sequence is proprietary) was used as the immunogen for the BLR1/CXCR5 antibody.

Storage

BLR1/CXCR5 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.