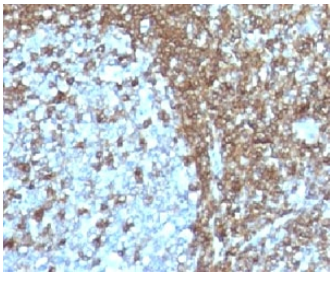
CD50 Antibody 186-2G9 / LFA-1 Blocking Antibody [clone 186-2G9] (V2138)

Catalog No.	Formulation	Size
V2138-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2138-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2138SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2138IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Citations (2)

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	186-2G9
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3385
Localization	Membrane, cytoplasm
Applications	Blocks binding of CD11a (LFA-1) to CD50 (ICAM-3) (order BSA/sodium azide-free format) Immunofluorescence: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This CD50 Antibody 186-2G9 / LFA-1 Blocking Antibody is available for research use only.



CD50 Antibody 186-2G9 in Human Tonsil IHC. Immunohistochemistry staining of FFPE human tonsil tissue with CD50 Antibody, clone 186-2G9. Tissue sections underwent HIER by boiling in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at room temperature for 20 min. Strong positive staining is present across a large portion of the lymphoid tissue, with clear regional heterogeneity and comparatively weak staining in the adjacent paler area. The staining demonstrates detection of CD50/ICAM3 by this LFA-1 Blocking Antibody in human tonsil tissue.

Description

CD50 Antibody 186-2G9 / LFA-1 Blocking Antibody recognizes CD50, a leukocyte cell-surface glycoprotein encoded by the ICAM3 gene. Also known as ICAM-3, CD50 belongs to the immunoglobulin superfamily and contains five extracellular immunoglobulin-like domains, a transmembrane region, and a cytoplasmic domain. Extensive N-linked glycosylation contributes to an apparent molecular weight of approximately 120 kDa, substantially greater than the molecular weight predicted from its amino acid sequence.

CD50 is expressed prominently by leukocytes, including thymocytes and T lymphocytes, and participates in adhesive interactions between cells of the immune system. A major binding partner is lymphocyte function-associated antigen 1 (LFA-1), the heterodimeric integrin composed of CD11a and CD18. Interaction between CD50 and LFA-1 contributes to leukocyte adhesion and the establishment of cell-cell contacts important to immune-cell communication and activation.

The extracellular domains of ICAM3 contribute differently to these molecular interactions. The membrane-distal D1 domain contains determinants involved in recognition by LFA-1 and is therefore particularly relevant to studies examining ICAM3-mediated adhesion. Antibodies directed against this region can provide tools for investigating the contribution of the CD50-LFA-1 interaction to leukocyte biology and immune-cell contacts.

Clone 186-2G9 is a mouse monoclonal antibody generated against stimulated human leukocytes. It recognizes the D1 extracellular domain of CD50/ICAM3, and the antibody has been reported to block binding of CD11a/LFA-1 to CD50. This functional characteristic provides useful differentiation from ICAM3 antibodies directed against other extracellular epitopes. Because blocking studies require antibody preparations free of potentially interfering additives, the appropriate BSA- and sodium azide-free formulation should be selected for this type of experiment.

NSJ Bioreagents offers this LFA-1 Blocking Antibody for research into CD50 biology and adhesion-related mechanisms. A CD50 Antibody recognizing the D1 domain can support investigation of ICAM3 expression, leukocyte interactions, and the molecular relationship between CD50 and LFA-1.

For a recombinant monoclonal option with additional validation data, see our CD50 Antibody rICAM3/1019 / LFA-1 Ligand CD50 Antibody page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD50 Antibody 186-2G9 / LFA-1 Blocking Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. 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

Stimulated human leukocytes were used as the immunogen for this CD50 Antibody 186-2G9.

Storage

Store the CD50 Antibody 186-2G9 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD50 antibody, ICAM3 antibody, ICAM-3 antibody, Intercellular adhesion molecule 3 antibody, LFA-1 blocking antibody, ICAM-R antibody

References (2)

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