

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ICAM-5 in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody does not cross-react with recombinant mouse (rm) DCC, rmlCAM-1, rhICAM-1, rmlCAM-2, rhICAM-3, rmMadCAM, rhCD31, or rmVCAM-1.
Source	Monoclonal Rat IgG _{2A} Clone # 191321
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ICAM-5 Leu31-Arg828 (Pro47Arg) Accession # Q60625
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Intercellular adhesion molecule-5 (ICAM-5), also known as telencephalin, is an integral membrane glycoprotein expressed in neurons of mammalian telencephalons. ICAM-5 is a member of the immunoglobulin superfamily and shares 38-55% amino acid homology with other ICAMs. Structurally, ICAM-5 contains nine Ig domains that included 15 N-glycosylation sites, a single transmembrane region, and C-terminal cytoplasmic tail (1). As with other members of the ICAM family, ICAM-5 has been shown to be involved in cellular adhesion. ICAM-5 binds to the leukocyte integrin LFA-1 (CD11a/CD18) via its first NH₂-terminal Ig domain. The ability of ICAM-5 to bind LFA-1 suggests that ICAM-5 may play an important role in immune responses in the central nervous system (2). Additionally, ICAM-5 has been found to promote homophilic binding via binding of the first Ig domain to Ig domains 4-5. Homophilic adhesion activity of ICAM-5 is regulated by a monomer/tetramer transition. ICAM-5 expression temporally parallels the onset of dendritic elongation and synaptogenesis during the postnatal period suggesting that ICAM-5 may provide a brain segment-specific cue for synaptogenesis or dendrite-dendrite interaction (3).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.