

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ICAM-5 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) CD31, rhCEACAM-1, recombinant mouse (rm) DCC, rhICAM-1, -2, -3, rmlCAM-5, rhMAdCAM-1, or rmVCAM-1 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 283607
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ICAM-5 Ala28-Glu570 Accession # Q9UMF0
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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	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 a cell surface glycoprotein belonging to the immunoglobulin superfamily. Human ICAM-5 consists of an 832 amino acid (aa) extracellular domain containing 9 immunoglobulin (Ig) domains and 15 N-glycosylation sites, a 28 aa transmembrane domain, and a 64 aa cytoplasmic domain. ICAM-5 shares 38-55% aa identity with other ICAMs, being most closely related to ICAM-1 (50% identity) and ICAM-3 (55% identity) (1). Human and mouse ICAM-5 share 85% aa identity. The tissue distribution of ICAM-5 is unique among ICAMs, being expressed only in telencephalic regions of the central nervous system (2). Like other ICAMs, ICAM-5 binds to the leukocyte integrin LFA-1 (CD11a/CD18) (3). Binding of ICAM-5 to LFA-1 is dependent on the first amino terminal Ig domain of ICAM-5 (4). ICAM-5 also displays homophilic binding, with the amino terminal Ig domain binding to Ig domains 4-5. Homophilic binding of ICAM-5 is dependent of ICAM-5 being in a monomeric form. The monomeric form of ICAM-5 is found during dendritogenesis in developing brain, whereas a high molecular weight complex is found in mature neurons (5).

PRODUCT SPECIFIC NOTICES

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