

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human ICAM-5 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant mouse ICAM-5 is observed and less than 2% cross-reactivity with recombinant human (rh) ICAM-1, rhICA                       |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human ICAM-5<br>Ala28-Glu570<br>Accession # Q9UMF0                                                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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 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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