

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse/Rat                                                                                                                                                                                                                                                                   |
| <b>Specificity</b>        | Detects mouse ICAM-5 in direct ELISAs. Detects mouse and rat ICAM-5 in Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) ICAM-5 and recombinant mouse (rm) ICAM-2 is observed, 5% cross                                       |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse ICAM-5<br>Leu31-Arg828 (Pro47Arg)<br>Accession # Q60625                                                                                                                                                               |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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

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