



# Monoclonal Anti-human ICAM-5 Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB1950

**Clone:** 283607

**Lot Number:** VPNO1

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human ICAM-5

**Immunogen:** NS0-derived rhICAM-5 extracellular domain

**Ig class:** mouse IgG<sub>2A</sub>

**Recommended Applications:**

Western blot  
Immunocytochemistry

**Other Application:**

Direct ELISA

### **Preparation**

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Intercellular Adhesion Molecule 5 (rhICAM-5) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. ICAM-5, also known as telencephalin, is an integral membrane glycoprotein that belongs to the immunoglobulin superfamily and is expressed by telencephalic neurons of the CNS. It is localized exclusively to the soma-dendritic membrane of the neurons but not to the axonal membrane. Variants of ICAM-5 are associated with the development of breast carcinoma. ICAM-5 demonstrates homophilic binding as well as binding to the leukocyte integrin LFA-1 (CD11a/CD18).

### **Formulation**

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### **Reconstitution**

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### **Storage**

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### **Specificity**

This antibody was selected for its ability to detect human ICAM-5 in western blots and immunocytochemistry experiments. In western blots, this antibody does not cross-react with rhCD31, rhCEACAM-1, rmDCC, rhICAM-1, -2, -3, rmICAM-5, rhMAdCAM-1, or rmVCAM-1.

### **Applications**

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human ICAM-5. Using a colorimetric detection system, the detection limit for rhICAM-5 is approximately 25 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Immunocytochemistry** - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect ICAM-5 in human MDA-MB-435 epithelial breast cancer cells. For chromogenic detection of labeling, the use of R&D Systems, Cell and Tissue Staining Kits (CTS Series) is recommended.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human ICAM-5. The detection limit for rhICAM-5 is approximately 6 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**

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**R&D Systems, Inc.**  
**1-800-343-7475**

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