

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse E-Cadherin in ELISAs and Western blots. In sandwich immunoassays, less than 1% cross-reactivity with recombinant human (rh) E-Cadherin, rhN-Cadherin, recombinant mouse (rm) P-Cadherin and rmVE-Cadherin is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse E-Cadherin Asp157-Val709 Accession # P09803
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

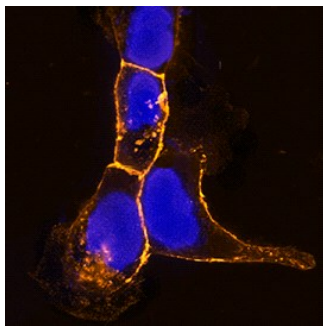
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse E-Cadherin Fc Chimera (Catalog # 748-EC)
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	Perfusion fixed frozen sections of mouse spinal cord
<b>Mouse E-Cadherin Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Mouse E-Cadherin Antibody (Catalog # MAB7482)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Mouse E-Cadherin Biotinylated Antibody (Catalog # BAF748)
<b>Standard</b>		Recombinant Mouse E-Cadherin Fc Chimera (Catalog # 748-EC)

## DATA

### Immunocytochemistry



**E-Cadherin in A431 Human Cell Line.** E-Cadherin was detected in immersion fixed A431 human skin epidermal cell line using Goat Anti-Mouse E-Cadherin Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF748) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (yellow; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Epithelial (E) - Cadherin (ECAD), also known as cell-CAM120/80 in the human, uvomorulin in the mouse, Arc-1 in the dog, and L-CAM in the chicken, is a member of the cadherin family of cell adhesion molecules. Cadherins are calcium-dependent transmembrane proteins, which bind to one another in a homophilic manner. On their cytoplasmic side, they associate with the three catenins,  $\alpha$ ,  $\beta$ , and  $\gamma$  (plakoglobin). This association links the cadherin protein to the cytoskeleton. Without association with the catenins, the cadherins are non-adhesive. Cadherins play a role in development, specifically in tissue formation. They may also help to maintain tissue architecture in the adult. E-Cadherin may also play a role in tumor development, as loss of E-Cadherin has been associated with tumor invasiveness. E-Cadherin is a classical cadherin molecule. Classical cadherins consist of a large extracellular domain which contains DXD and DXNDN repeats responsible for mediating calcium-dependent adhesion, a single-pass transmembrane domain, and a short carboxy-terminal cytoplasmic domain responsible for interacting with the catenins. E-Cadherin contains five extracellular calcium-binding domains of approximately 110 amino acids each.

### References:

1. Bussemakers, M.J.G. *et al.* (1993) *Mol. Biol. Reports* **17**:123.
2. Overduin, M. *et al.* (1995) *Science* **267**:386.
3. Takeichi, M. (1991) **251**:1451.