

DESCRIPTION

Species Reactivity	Mouse
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse E-Cadherin Asp157-Val709 Accession # P09803
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

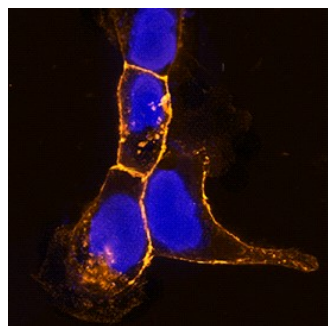
APPLICATIONS

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

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

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, α, β, and γ (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:

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