

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse E-Cadherin in ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse (rm) VE-Cadherin, rmP-Cadherin, recombinant human (rh) Cadherin-17, or rhN-Cadherin is observed.
Source	Monoclonal Rat IgG ₁ Clone # 114403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse E-Cadherin Asp157-Val709 (predicted) Accession # P09803
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

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)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
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:

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.