

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse P-Cadherin in ELISAs and Western blots. In sandwich immunoassays, less than 2% cross-reactivity with recombinant human (rh) P-Cadherin is observed and less than 0.3% cross-reactivity with recombinant mouse E-Cadherin, rhN-Cadherin, and rhCadherin-8 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse P-Cadherin Glu100-Gly647 Accession # Q8BSL6
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 P-Cadherin Fc Chimera (Catalog # 761-MP)
Flow Cytometry	2.5 µg/10 ⁶ cells	XB2 mouse teratoma keratinocyte cell line
Mouse P-Cadherin Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 µg/mL	Mouse P-Cadherin Antibody (Catalog # AF761)
ELISA Detection	0.1-0.4 µg/mL	Mouse P-Cadherin Biotinylated Antibody (Catalog # BAF761)
Standard		Recombinant Mouse P-Cadherin Fc Chimera (Catalog # 761-MP)

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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Placental Cadherin (P-Cadherin or PCAD) 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. P-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. Constitutive P-Cadherin expression is found in the epidermis, mesothelium, corneal epithelium, and uterine decidua. Mouse P-Cadherin is an 822 amino acid (aa) protein with a 27 aa signal sequence and a 795 aa propeptide. The mature protein begins at aa 100 and has a 542 aa extracellular region, a 27 aa transmembrane region, and a 153 aa cytoplasmic region.

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) *Science* **251**:1451.
4. Nose, A. *et al.* (1987) *EMBO J.* **6**:3655.