Species Reactivity: Human

Specificity: Detects human E-Cadherin in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Cadherin-β, rhCadherin-17, recombinant mouse E-Cadherin, rhN-Cadherin, rhP-Cadherin, or rhVE-Cadherin is observed.

Source: Monoclonal Mouse IgG2B Clone # 180215

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: Mouse myeloma cell line NS0-derived recombinant human E-Cadherin Asp155-Ile707

Accession #: P12830

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 either lyophilized or 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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.5 μg/mL</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>2-25 μg/mL</td>
</tr>
<tr>
<td>Simple Western</td>
<td>5 μg/mL</td>
</tr>
</tbody>
</table>

DATA

Western Blot: Detection of Human E-Cadherin by Western Blot. Western blot shows lysates of A549 human lung carcinoma cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 0.5 μg/mL of Mouse Anti-Human E-Cadherin Monoclonal Antibody (Catalog # MAB1838) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for E-Cadherin at approximately 110 kDa (as indicated). This experiment was conducted under reducing conditions and using Immoblot Buffer Group 1.

Immunohistochemistry: E-Cadherin in Human Colon. E-Cadherin was detected in immersion fixed paraffin-embedded sections of human colon using Mouse Anti-Human E-Cadherin Monoclonal Antibody (Catalog # MAB1838) at 2 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific labeling was localized to the plasma membrane of epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

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.

- 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.
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: