



CDH2 Polyclonal Antibody

E93045

Catalog Number: E93045**Amount:** 100ul

Background: Cadherins are a superfamily of transmembrane glycoproteins that contain cadherin repeats of approximately 100 residues in their extracellular domain. Cadherins mediate calcium-dependent cell-cell adhesion and play critical roles in normal tissue development (1). The classic cadherin subfamily includes N-, P-, R-, B-, and E-cadherins, as well as about ten other members that are found in adherens junctions, a cellular structure near the apical surface of polarized epithelial cells. The cytoplasmic domain of classical cadherins interacts with β -catenin, γ -catenin (also called plakoglobin), and p120 catenin. β -catenin and γ -catenin associate with α -catenin, which links the cadherin-catenin complex to the actin cytoskeleton (1,2). While β - and γ -catenin play structural roles in the junctional complex, p120 regulates cadherin adhesive activity and trafficking (1-4). Investigators consider E-cadherin an active suppressor of invasion and growth of many epithelial cancers (1-3). Recent studies indicate that cancer cells have up-regulated N-cadherin in addition to loss of E-cadherin. This change in cadherin expression is called the "cadherin switch". N-cadherin cooperates with the FGF receptor, leading to overexpression of MMP-9 and cellular invasion (3). Research studies have shown that in endothelial cells, VE-cadherin signaling, expression, and localization correlate with vascular permeability and tumor angiogenesis (5,6). Investigators have also demonstrated that expression of P-cadherin, which is normally present in epithelial cells, is also altered in ovarian and other human cancers (7,8).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20°C or -80°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: CDHN; NCAD; CD325; CDw325; N-Cadherin;

Immunogen: A synthetic peptide of human CDH2

Purification: Affinity purification

Reactivity: H M R

Applications: WB

Molecular Weight: 100kDa

Swiss-Prot No. : P19022

Gene ID: 1000

References: 1. Wheelock, M.J. and Johnson, K.R. (2003) Annu. Rev. Cell. Dev. Biol. 19, 207-235. 2. Christofori, G. (2003) EMBO J. 22, 2318-2323. 3. Hazan, R.B. et al. (2004) Ann. NY Acad. Sci. 1014, 155-163. 4. Bryant, D.M. and Stow, J.L. (2004) Trends Cell Biol. 14, 427-434. 5. Rabascio, C. et al. (2004) Cancer Res. 64, 4373-4377. 6. Yamaoka-Tojo, M. et al. (2006) Arterioscler. Thromb. Vasc. Biol. 26, 1991-1997. 7. Patel, I.S. et al. (2003) Int. J. Cancer 106, 172-177. 8. Sanders, D.S. et al. (2000) J. Pathol. 190, 526-530.

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