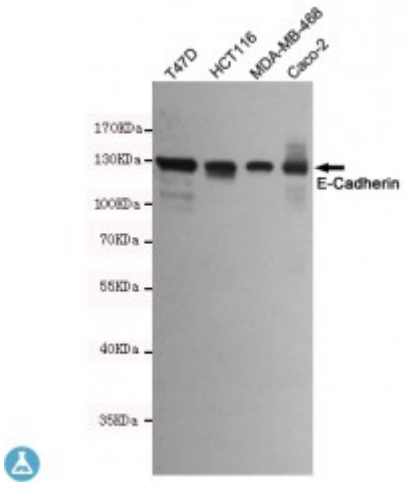
Anti-E-Cadherin antibody



Description	Mouse monoclonal to E-Cadherin.

Model	STJ99316
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Gene ID	999
Gene Symbol	CDH1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of E-Cadherin and does not cross-react with related proteins.
Tissue Specificity	Non-neural epithelial tissues.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	6B10-F4-G10
Note	For Research Use Only (RUO).
Protein Name	Cadherin-1 CAM 120/80 Epithelial cadherin E-cadherin Uvomorulin CD antigen CD324 E-Cad/CTF1 E-Cad/CTF2 E-Cad/CTF3
Molecular Weight	135kDa
Clonality	Monoclonal
Conjugation	Unconjugated

Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1748OMIM:119580
Alternative Names	Cadherin-1 CAM 120/80 Epithelial cadherin E-cadherin Uvomorulin CD antigen CD324 E-Cad/CTF1 E-Cad/CTF2 E-Cad/CTF3
Function	Cadherins are calcium-dependent cell adhesion proteins . They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells . Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7. E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.
Sequence and Domain Family	Three calcium ions are usually bound at the interface of each cadherin domain and rigidify the connections, imparting a strong curvature to the full-length ectodomain.
Cellular Localization	Cell junction Cell membrane. Single-pass type I membrane protein. Endosome. Golgi apparatus, trans-Golgi network. Colocalizes with DLGAP5 at sites of cell-cell contact in intestinal epithelial cells. Anchored to actin microfilaments through association with alpha-, beta- and gamma-catenin. Sequential proteolysis induced by apoptosis or calcium influx, results in translocation from sites of cell-cell contact to the cytoplasm. Colocalizes with RAB11A endosomes during its transport from the Golgi apparatus to the plasma membrane.
Post-translational Modifications	During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium influx, causes disruption of cell-cell adhesion and the subsequent release of beta-catenin into the cytoplasm. The residual membrane-tethered cleavage product is rapidly degraded via an intracellular proteolytic pathway. Cleavage by caspase-3 releases the cytoplasmic tail resulting in disintegration of the actin microfilament system. The gamma-secretase-mediated cleavage promotes disassembly of adherens junctions. N-glycosylation at Asn-637 is essential for expression, folding and trafficking. Ubiquitinated by a SCF complex containing SKP2, which requires prior phosphorylation by CK1/CSNK1A1. Ubiquitinated by CBLL1/HAKAI, requires prior phosphorylation at Tyr-754.