

12-1092: Anti-Catenin, beta (CTNNB1) Recombinant Mouse Monoclonal Antibody (Clone:rCTNNB1/2173)

Clonality :	Monoclonal
Clone Name :	rCTNNB1/2173
Application :	IF, WB, IHC
Reactivity :	Human, Mouse, Rat
Gene :	CTNNB1
Gene ID :	1499
Uniprot ID :	P35222
Format :	Purified
Alternative Name :	Cadherin associated protein, beta 1 88kDa, Catenin beta-1, CATNB, CHBCAT, CTNNB1
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant full-length human CCBN1 protein

Description

Beta-catenin associates with the cytoplasmic portion of E-cadherin, which is necessary for the function of E-cadherin as an adhesion molecule. In normal tissues, beta-catenin is localized to the membrane of epithelial cells, consistent with its role in the cell adhesion complex. In breast ductal neoplasia, beta-catenin is usually localized in cellular membranes. However, in lobular neoplasia, a marked redistribution of beta-catenin throughout the cytoplasm results in a diffuse cytoplasmic pattern. Immuno-staining of beta-catenin and E-cadherin helps in the accurate identification of ductal and lobular neoplasms, including a distinction between low-grade ductal carcinoma in situ (DCIS) and lobular carcinoma. Additionally, some rectal and gastric adenocarcinomas demonstrate diffuse cytoplasmic beta-catenin staining and a lack of membranous staining, mimicking the staining pattern observed with lobular breast carcinomas.

Product Info

Amount :	20 µg / 100 µg
Purification :	Protein A/G
Content :	200µg/ml of recombinant MAb purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Immunofluorescence (1-2 µg/ml); Western Blot (1-2 µg/ml); Immunohistochemistry (Formalin-fixed) (1-2 µg/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes),

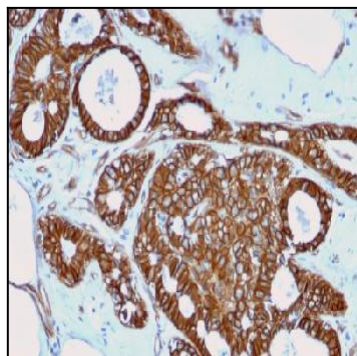


Figure 1: Formalin-fixed, paraffin-embedded human Breast Cancer stained with Beta-Catenin Mouse Recombinant Monoclonal Antibody (rCTNNB1/2173).

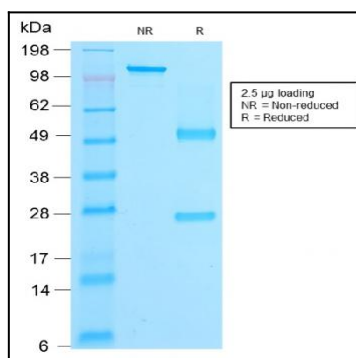


Figure 2: SDS-PAGE Analysis of Purified Beta-Catenin Mouse Recombinant Monoclonal Ab (rCTNNB1/2173).

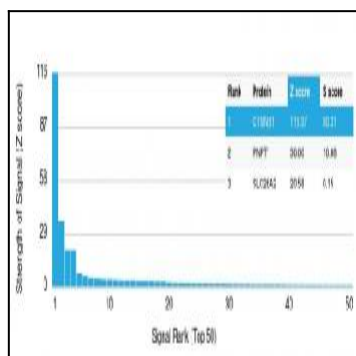


Figure 3: Analysis of Protein Array containing >19,000 full-length human proteins using Beta-Catenin Mouse Monoclonal Antibody (rCTNNB1/2173) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.