

## Product datasheet for **AM26027PU-N**

### beta Catenin (CTNNB1) Mouse Monoclonal Antibody [Clone ID: EM-22]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	EM-22
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	<b>Flow Cytometry.</b> <b>Immunoprecipitation.</b> <b>Western blot.</b> <i>Positive Control:</i> HT29 Human colon adenocarcinoma cell line, FHC human cell line, DLD1 human colon adenocarcinoma cell line, KW1 mouse cell line C57MG mouse cell line, 3T3 mouse fibroblast cell line. <b>Immunocytochemistry.</b> <i>Positive Control:</i> HT29 human colon adenocarcinoma cell line. This clone has been described to work in <b>Immunohistochemistry on Paraffin Sections.</b>
Reactivity:	Hamster, Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant Human beta-Catenin
Specificity:	This antibody reacts with C-terminal part of beta-Catenin, an 88 kDa multifunctional protein involved both in cell adhesion and in activation of transcription.
Formulation:	PBS, pH~7.4 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 15 mM Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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**Gene Name:** catenin beta 1

**Database Link:** [Entrez Gene 12387 Mouse](#)[Entrez Gene 1499 Human](#)  
[P35222](#)

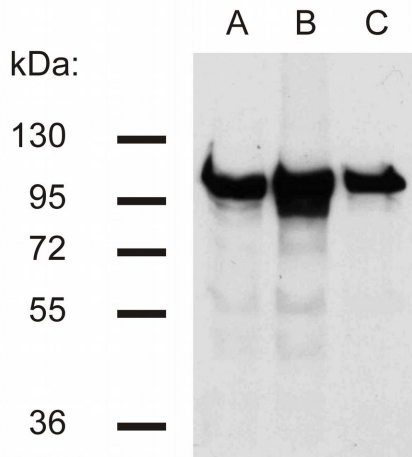
**Background:** Beta-catenin is a multifunctional protein involved both in cell adhesion and in activation of transcription. Calcium-dependent intercellular adhesion transmembrane glycoprotein E-cadherin interacts by its cytoplasmic domain with reciprocally bound alpha, beta and gamma catenin. Beta-catenin links this complex through alpha-actinin to the cytoskeleton. Functional cadherin-catenin system is important for invasiveness of tumour cells. Beta-catenin level in cytoplasm is controlled by glycogen synthase kinase-3 beta. When activity of this kinase is blocked (e.g. by excessive stimulation of Wnt signaling pathway), hypophosphorylated stable form of beta-catenin accumulates in the cytoplasm, translocates to the nucleus and activates transcription of genes including those that are involved in cell cycle control. As a result, cell division and neoplastic transformation are promoted.

**Synonyms:** CTNNB1, CTNNB, Beta-catenin

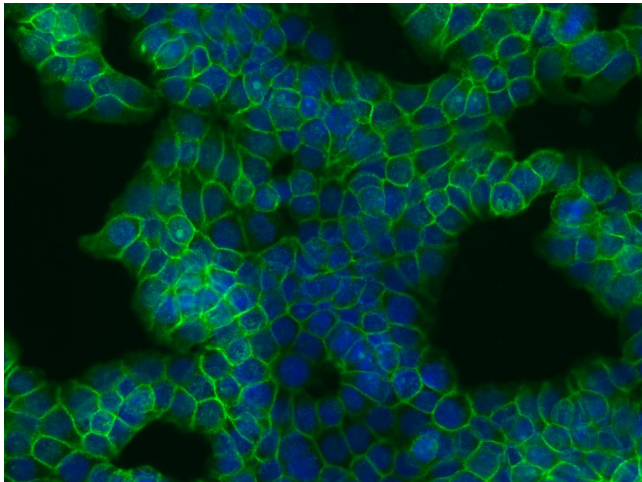
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

**Protein Pathways:** Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Focal adhesion, Leukocyte transendothelial migration, Melanogenesis, Pathogenic Escherichia coli infection, Pathways in cancer, Prostate cancer, Thyroid cancer, Tight junction, Wnt signaling pathway

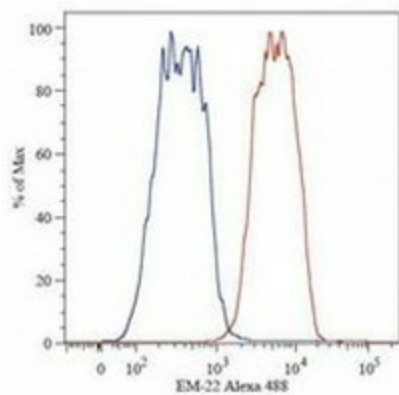
**Product images:**



Western blotting analysis of beta-catenin in murine 3T3 (A), C57 (B) and KW1 (C) cell lines using EM-22 antibody.



Immunocytochemistry staining of beta-catenin in human colon adenocarcinoma cell line HT29 using EM-22 antibody (green). Cell nuclei visualized by DAPI (blue).



Flow cytometry analysis (intracellular) of beta-catenin in human MCF-7 cell line by EM-22-Alexa Fluor® 488 (red) compared to isotype control (blue).