## Mouse Monoclonal Antibody to

# β-Catenin (core)

# clone 9G10

**Order No.:** **0005-100/b-CAT-9G10**

**Size (µg)** 100

**Lot No.:** 0005S

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02/140307F

| Isotype | Species Reactivity | Applications | Mol. Weight | Ref.Cell Line | Epitope | Immunogen |
|---|---|---|---|---|---|---|
| IgG2b | human, mouse, dog | WB, ELISA, IP, ICC, IHC (PS) | 90 kDa | SW480 | core (armadillo repeats) | recombinant beta-Catenin |

**Background and Specificity:**

The α-, β- and γ-catenins are cytoplasmic proteins mediating the interaction of $Ca^{2+}$-dependent transmembrane adhesion molecules (cadherins) with the cytoskeletal network. The direct interaction of β-catenin with the cytoplasmic domain of cadherins plays a crucial role for cell-cell adhesion and signal transmission between neighbouring cells. Recent studies indicate that β-catenin may also play a role in tumorigenesis since it forms complexes with the tumor suppressor gene product APC. β-catenin directly interacts and constitutively activates transcription factors of the TCF/LEF gene family. Thus it is proposed that β-catenin plays a dual role not only in the maintainance and regulation of cell-cell interactions but also in the regulation of gene activity.

**Mab β-CAT-9G10** specifically interacts with the core region (armadillo repeats) of β-catenin.

**Purification:** The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.

**Formulation:** lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.

**Reconstitution:** Reconstitute with 1 ml $H_2O$ (15 min, RT).

**Stability:** For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

**Avoid repeated freeze / thaw cycles.**

**Positive Control:** #0801: Cell lysate from untreated SW480 cells.

**Immunoblotting:** 0.5 µg/ml for HRPO/ECL detection
**Recommended blocking buffer:** Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.

**Immunoprecipitation:** use at 1 - 10 µg per $10^6$ vanadate treated A431 cells

**Immunocytochemistry:** use at 0.1-1 µg/ml

**ELISA:** use at 0.05 µg/ml

**All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.**

**Related Products**

**mab to b-catenin (N-Term/Exon2)**
#0003-100/b-CAT-7D11

**mab to b-catenin (Exon3)**
#0004-100/b-CAT-9G2

**mab to b-catenin (C-Term/Exon14)**
#0002-100/b-CAT-7D8

**mab to b-catenin (C-Term)**
#0006-100/b-CAT-10H8

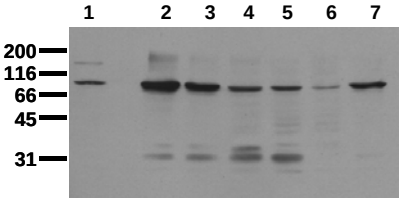
**mab to dephospho-b-catenin (aa35-50)**
#0051-100/b-CAT-7A7

**mab to dephospho-b-catenin (aa27-37)**
#0052-100/b-CAT-8E4

**mab to phospho-b-catenin (pY86)**
#0123-100/b-CAT-24E1

**mab to phospho-b-catenin (pY654)**
#0159-100/b-CAT-1B11

For monoclonal antibodies against alpha-catenin, LEF, TFF3, E-, M- and N-Cadherin, please refer to our website at www.nanotools.de




**Detection of endogenous b-catenin**

Whole cell extracts of pervanadate (VH) treated tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to PVDF membranes. Immunoblots were probed with mab b-cat 9G10 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).
VH treatment : 15 min

lane 1: A431; lane 2: SW480; lane 3: SW620; lane 4: HT29; lane 5: MCF-7; lane 6: MDA231; lane 7: T47D