

## Mouse Monoclonal Antibody to

# $\beta$ -Catenin, N-terminus (exon 2)

## clone 7D11

**Order No.:** 0003-100/b-CAT-7D11  
**Size ( $\mu$ g)** 100  
**Lot No.:** 0003S



[www.nanotools.de](http://www.nanotools.de)

**orders & support:**

email: [info@nanotools.de](mailto:info@nanotools.de)  
 phone: +49-7641-455 670  
 fax: +49-7641-455 671

03/040613F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG2a	human, mouse, dog	WB, ELISA, IP	90 kDa	SW480	N-terminus, exon 2	recombinant $\beta$ -Catenin

### Background and Specificity:

The  $\alpha$ -,  $\beta$ - and  $\gamma$ -catenins are cytoplasmic proteins mediating the interaction of  $Ca^{2+}$ -dependent transmembrane adhesion molecules (cadherins) with the cytoskeletal network. The direct interaction of  $\beta$ -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  $\beta$ -catenin may also play a role in tumorigenesis since it forms complexes with the tumor suppressor gene product APC.  $\beta$ -catenin directly interacts and constitutively activates transcription factors of the TCF/LEF gene family. Thus it is proposed that  $\beta$ -catenin plays a dual role not only in the maintenance and regulation of cell-cell interactions but also in the regulation of gene activity.

**Mab  $\beta$ -CAT-7D11** specifically interacts with the N-terminus (exon 2) of  $\beta$ -catenin at 90 kDa.

### Related Products

- mab to b-catenin (Exon3)**  
#0004-100/b-CAT-9G2
- mab to b-catenin (Core)**  
#0005-100/b-CAT-9G10
- 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](http://www.nanotools.de)

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

**Formulation:** lyophilized from 1 ml 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

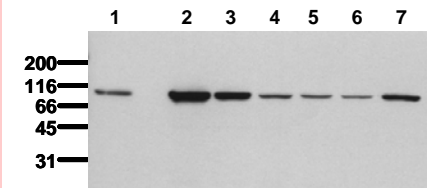
**Positive Control:** #0801: Cell lysate from untreated SW480 cells.

**Immunoblotting:** 0.5  $\mu$ g/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  $\mu$ g per  $10^6$  vanadate treated A431 cells

**Immunocytochemistry:** ND

**ELISA:** use at 0.05  $\mu$ g/ml



**Detection of endogenous  $\beta$ -Catenin**  
 Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab b-Cat-7D11 (0.5  $\mu$ g/ml) for 1h at RT and developed by ECL (exp. time: 3 min).

lane 1: A431; lane 2: SW480; lane 3: SW620; lane 4: HT29; lane 5: MCF7; lane 6: MDA-MB231; lane 7: T47D

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