

## Mouse Monoclonal Antibody to

# $\beta$ -Catenin, dephospho

## clone 7A7

**Order No.:** 0051-100/b-CAT-7A7

**Size ( $\mu$ g)** 100

**Lot No.:** 0051S



02/140307F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human, mouse, dog	WB, ELISA, ICC, IHC (PS)	90 kDa	SW480	aa 35-50	peptide conjugated to KLH

### 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-7A7** specifically interacts with cytoplasmic dephospho  $\beta$ -catenin.

### 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 (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 (aa27-37)**

#0052-100/b-CAT-8E4

**mab to phospho-b-catenin (pY86)**

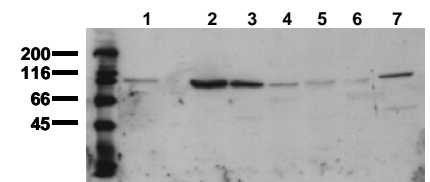
#0123-100/b-CAT-24E1

**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)

<b>Purification:</b>	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
<b>Formulation:</b>	lyophilized from 1 ml 2 x PBS / 0.1 % Na-azide / PEG and Sucrose.
<b>Reconstitution:</b>	Reconstitute with 1 ml H <sub>2</sub> O (15 min, RT).
<b>Stability:</b>	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.
	<b>Avoid repeated freeze / thaw cycles.</b>
<b>Positive Control:</b>	#0803: Cell lysate from LiCl - treated SW480 cells.
<b>Immunoblotting:</b>	0.5 $\mu$ g/ml for HRPO/ECL detection <b>Recommended blocking buffer:</b> Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.
<b>Immunoprecipitation:</b>	ND
<b>Immunocytochemistry:</b>	use at 1 - 10 $\mu$ g/ml
<b>ELISA:</b>	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  $\beta$ -Cat-7A7 (0.5  $\mu$ g/ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

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.**