

# **Mouse Monoclonal Antibody to**

# β-Catenin (phospho-Tyr 86)

# clone 24E1

Order No.: 0123-100/b-CAT-24E1

Size (μg) 100 Lot No.: 0123S



## www.nanotools.de

orders & support:

email: info@nanotools.de phone: +49-7641-455 670 fax: +49-7641-455 671

04/040613F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
lgG1	human, mouse, dog	WB	90 kDa	SW480	phosphotyrosine 86 D G Q pY A M T	phosphopeptide conjugated to hemocyanin

### **Background and Specificity:**

The  $\alpha$ -,  $\beta$ - and  $\gamma$ -catenins are cytoplasmic proteins mediating the interaction of Ca²+-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 maintainance and regulation of cell-cell interactions but also in the regulation of gene activity. Additionally,  $\beta$ -catenin is a substrate of both receptor and non-receptor tyrosine kinases. Tyrosine 86 and tyrosine 654 are substrates of EGF receptor and src family kinases while tyrosine 142 is a substrate of fer tyrosine kinase.

**Mab** β-CAT-24E1 specifically recognizes  $\beta$ -catenin phosphorylated at tyrosine 86 at 90 kDa.

**Purification:** The antibody was purified from serum-free cell culture

supernatant by subsequent thiophilic adsorption and size

 $exclusion\ chromatography.$ 

Formulation: Iyophilized from 1 ml PBS / 0.09 % Na-azide / PEG and Sucrose

**Reconstitution:** Reconstitute with 1 ml H<sub>2</sub>O (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:** #0802: Cell lysate from pervanadate-treated SW480 cells.

**Immunoblotting:** 1 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: ND

Immunocytochemistry: ND

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 (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

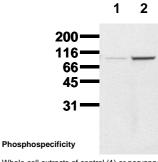
mab to dephospho-b-catenin (aa27-37) #0052-100/b-CAT-8E4

mab to phospho-b-catenin (pY86)

#0123-100/b-CAT-24E1

mab to phospho-b-catenin (pY654)

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



Whole cell extracts of control (1) or pervanadate treated (2) SW480 tumor cells were applied to SDS-PAGE (ca 20.000 cells per lane) and transferred to a PVDF membrane. The immunoblot was probed with mab b-Cat-24E1 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).