

## Mouse Monoclonal Antibody to

# $\beta$ -Catenin (phospho-Tyr 86)

## clone 24E1

## Biotinylated

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

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

**Lot No.:** 0123S



01/230207F

| Isotype | Species Reactivity | Applications | Mol. Weight | Ref.Cell Line | Epitope                              | Immunogen                                  |
|---------|--------------------|--------------|-------------|---------------|--------------------------------------|--|
| IgG1    | human, mouse, dog  | WB           | 90 kDa      | SW480         | phosphotyrosine 86<br>D G Q pY A M T | phosphopeptide<br>conjugated to hemocyanin |

### Background and Specificity:

The  $\alpha$ -,  $\beta$ - and  $\gamma$ -catenins are cytoplasmic proteins mediating the interaction of  $\text{Ca}^{2+}$ -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. 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  $\beta$ -CAT-24E1** specifically recognizes  $\beta$ -catenin phosphorylated at tyrosine 86 at 90 kDa.

### 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)**  
#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>         | liquid; 0.5 mg/ml in PBS/0.09% Na-Azide/PEG and Sucrose   |
| <b>Reconstitution:</b>      |   |
| <b>Stability:</b>           | Aliquote and freeze in liquid nitrogen; antibody can be stored frozen at $-80^{\circ}\text{C}$ up to 1 year. Thaw aliquots at $37^{\circ}\text{C}$ . Thawed aliquots may be stored at $4^{\circ}\text{C}$ up to 3 months. |
|                             | <b>Avoid repeated freeze / thaw cycles.</b>   |
| <b>Positive Control:</b>    | #0802: Cell lysate from pervanadate-treated SW480 cells.  |
| <b>Immunoblotting:</b>      | 1 $\mu$ g/ml for HRPO/ECL detection<br><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> | ND  |
| <b>ELISA:</b>               | use at 0.05 $\mu$ g/ml  |

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