

## Mouse Monoclonal Antibody to

# erbB2 (aa 1240-1260)

## clone 19D2

**Order No.:** 0192-100/erbB2-19D2  
**Size (µg)** 100  
**Lot No.:** 0192S



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02/230207F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human, mouse, dog	WB	185 kDa	SKOV-3	aa 1240 - 1260	peptide conjugated to hemocyanin

### Background and Specificity:

ErbB2 is a member of the EGFR/erbB-receptor tyrosine kinase family. Dysregulation of erbB2 and/or activation of downstream signaling pathways has been implicated in many human cancers. ErbB2 is activated upon ligand dependent heterodimerization with EGFR or erbB4. ErbB2 homodimers are not favored due to the lack of an erbB2 specific extracellular ligand. Heterodimerization with EGFR or erbB4 leads to activation of the intrinsic tyrosine kinase activity of EGFR or erbB4 resulting in phosphorylation of multiple tyrosine residues within the erbB2 intracellular domain: Tyr 1023, Tyr 1112, Tyr 1139, Tyr 1196, Tyr 1222, and Tyr 1248. Transphosphorylation via src family kinases leads to phosphorylation of Tyr 877, via PKC of Thr 686, via CamKinase2 of Ser 1113. Phosphorylation of Thr 686 and Ser 1113 interferes with erbB2 endocytosis and degradation.

**Mab erbB2-19D2** specifically recognizes erbB2 at 185 kDa.

### Related Products

- mab to erbB2 (intracellular domain; aa 860-880)**  
#0222-100/erbB2-24B5
- mab to erbB2 (phospho-Ser 1113)**  
#0139-100/erbB2-9E10
- mab to erbB2 (phospho-Thr 686)**  
#0182-100/erbB2-7F8
- mab to erbB2 (phospho-Tyr 1112)**  
#0216-100/erbB2-19G5
- mab to erbB2 (phospho-Tyr 1248; crossreacts with EGFR)**  
#0221-100/erbB2-6G7
- mab to erbB3 (aa1250-1270)**  
#0237-100/erbB3-5A12
- mab to erbB3 (C-terminus)**  
#0141-100/erbB3-11A4
- mab to erbB4 (aa1230-1250)**  
#0228-100/erbB4-6C5
- mab to erbB4 (pospho-Tyr 1242)**  
#0229-100/erbB4-4C6

For monoclonal antibodies against EGFR and downstream targets, 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 ultrafiltration and size exclusion chromatography.

**Formulation:** lyophilized 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.

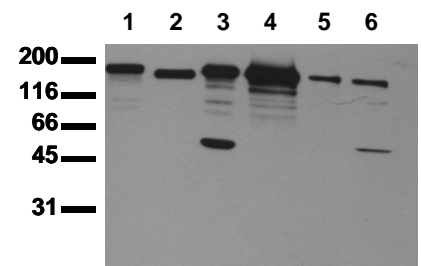
**Avoid repeated freeze / thaw cycles.**

**Positive Control:** #0991: Cell lysate from untreated SKOV-3 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:** ND  
**Immunocytochemistry:** ND  
**ELISA:** ND

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



**Detection of endogenous erbB2**

Whole cell extracts 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 erbB2-19D2 (0.5 µg/ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

lane 1: MDA-MB 231; lane 2: MDA-MB 468; lane 3: MCF-7; lane 4: T47D; lane 5: SW480; lane 6: SW620