

## **Product datasheet for AM00050PU-N**

## OriGene Technologies, Inc.

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## Her2 (ERBB2) pTyr1112 (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 19G5]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 19G5
Applications: IF, WB

**Recommended Dilution: Immunoblotting:** 0.5 μg/ml for HRPO/ECL detection.

Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer

AS00002BU-N or AS00002BU-L.

Immunocytochemistry.

Included Positive Control: Cell lysate from EGF-treated SKOV-3 cells (See Protocols for more

details).

**Reactivity:** Canine, Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Synthetic phosphopetide conjugated to KLH.

**Specificity:** This antibody specifically recognizes erbB2 phosphorylated at Tyrosine 1112 at 185 kDa.

Formulation: 1ml PBS containing 0.09% Sodium Azide/PEG and Sucrose

State: Purified

State: Lyophilized purified IgG fraction

**Reconstitution Method:** Restore with 1 ml H<sub>2</sub>O (15 min, RT).

**Purification:** Subsequent Ultrafiltration and Size Exclusion Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze

in liquid nitrogen) at -80°C.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

Predicted Protein Size: 185 kDa



Database Link: Entrez Gene 2064 Human

P04626

**Background:** 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.

Synonyms: HER-2, NEU, p185erbB2, NGL, c-erbB-2, MNL19

Note: Protocol: <u>Positive Control Provided:</u> Cell lysate from EGF-treated SKOV-3 cells

**Format:** Lyophilized cell lysate from SKOV-3 cells. Serum starved cells were treated for 15min with EGF.

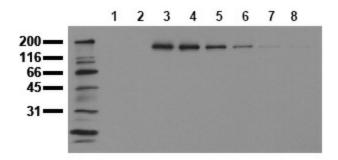
**Reconstitution:** Restore by addition of 200  $\mu$ l H20. After complete solubilization add 200  $\mu$ l 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

**Storage:** Aliquote and store frozen. Avoid repeated freeze/thaw cycles.

**Application:** The positive control cell lysate is recommended for immunoblot applications. 20  $\mu$ l of positive control cell lysate correspond to ca. 80.000 cells. Use 20  $\mu$ l / lane (mini gel) for HRPO/ECL detection of the target proteins.

**Please note:** The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation.

## **Product images:**



ErbB2 activation: Serum starved A549 cells were incubated with 10 ng/ml EGF for the indicated times. Whole cell lysates were prepared with lysis buffer V19 and separated by SDS-PAGE (ca 20.000 cells/lane). The immunoblot was probed with mab erbB2-19G5 (0.5 ug/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec). Lane 1: Control Lane 2: 5 min EGF Lane 3: 15 min EGF Lane 4: 30 min EGF Lane 5: 1h EGF Lane 6; 2h EGF Lane 7: 4h EGF Lane 8: 8h EGF