

## Product datasheet for AM00050BT-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:** Specifically recognizes erbB2 phosphorylated at Tyrosine 1112 at 185 kDa.

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

Label: Biotin

State: Liquid purified IgG fraction.

**Concentration:** lot specific

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

**Conjugation:** Biotin

Storage: Aliquote and freeze in liquid nitrogen

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.

**Gene Name:** erb-b2 receptor tyrosine kinase 2

Database Link: Entrez Gene 13866 MouseEntrez Gene 24337 RatEntrez Gene 2064 Human

P04626





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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.

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

Note: Mol. weight: 185 kDa.

> Protocol: Positive Control Provided. Cell lysate from EGF-treated SKOV-3 cells

**Description:** Cell lysate from EGF-treated SKOV-3 cells, ovary adenocarcinoma (Human)

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

**Reconstitution:** Restore by addition of 200 μl H20. After complete solubilization add 200 μl 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 μl of positive control cell lysate correspond to ca. 80.000 cells. Use 20 μl / 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.

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Adherens junction, Bladder cancer, Calcium signaling pathway, Endometrial cancer, ErbB

signaling pathway, Focal adhesion, Non-small cell lung cancer, Pancreatic cancer, Pathways in

cancer, Prostate cancer