



Mouse (monoclonal) anti-ErbB2/Her2 [pY1112]

PRODUCT ANALYSIS SHEET

Catalog Number:	44899M
Volume:	50 µL
Clone Number:	19G5
Isotype:	IgG1 (mouse)
Form of Antibody:	Mouse monoclonal immunoglobulin in PBS, pH 7.3, with PEG and Sucrose.
Preservative:	0.09% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	The antibody was purified from serum-free cell culture supernatant by subsequent ultrafiltration and size exclusion chromatography.
Immunogen:	Phosphopeptide containing amino acid sequence LQR[pY]SED, conjugated to hemocyanin.
Target Summary:	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 the following tyrosine residues within the ErbB2 intracellular domain: 1023, 1112, 1139, 1196, 1222 and 1248. Trans-phosphorylation (TP) via Src family kinases leads to phosphorylation of tyrosine 877, TP via PKC leads to phosphorylation of threonine 686 and TP via CaMK II leads to phosphorylation of serine 1113. Phosphorylation of threonine 686 and serine 1113 interferes with ErbB2 endocytosis and degradation.
Specificity:	This Mab specifically recognizes human ErbB2 phosphorylated at threonine 686 (185 kDa).
Species Reactivity:	Human, mouse, rat and dog.
Applications:	The antibody is suitable for Western blotting and Immunocytochemistry. Other applications may be possible but have not been tested.
Suggested Working Dilutions:	Immunoblotting: 0.5 µg/mL for HRP/ECL detection. The optimal antibody concentration should be determined empirically for each specific application.
Recommended Positive Control:	Cell lysate from EGF-treated SKOV-3 cells.
Storage:	Upon arrival, we recommend a brief centrifugation before opening to settle vial contents. Then, apportion the antibody into working aliquots and store at -20°C. Avoid repeated freeze / thaw cycles.
Expiration Date:	Expires one year from date of receipt when stored as instructed.

This product is for research use only. Not for use in diagnostic procedures.

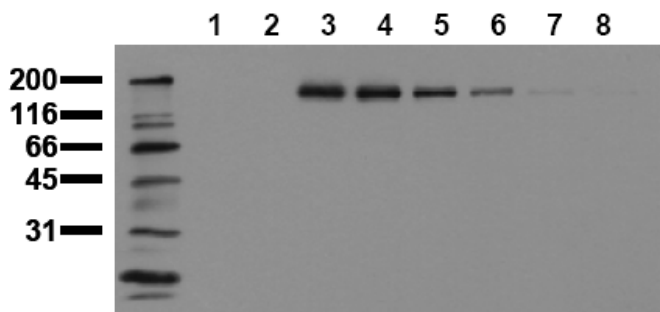
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(Rev 11/08) DCC-08-1089

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Western Blotting

Whole cell lysates of serum starved A549 cells untreated (1) or incubated with 10 ng/mL EGF for 5 minutes (2), 15 minutes (3), 30 minutes (4), 1 hour (5), 2 hours (6), 4 hours (7) and 8 hours (8) (approximately 20,000 cells per lane) prepared with lysis buffer V19 were resolved by SDS-PAGE and transferred to PVDF. The membrane was blocked with a casein/Tween 20 buffer, then incubated with the Mab at 0.5 µg/mL for 1 hour at room temperature. After washing, the membrane was incubated with an anti-mouse HRP-conjugated secondary antibody and signals were detected using an ECL detection method (exposure time: 30 seconds).

The data show the regulation of ErbB2 [pY1112] activation upon EGF treatment over a range of time points in this cell system.

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