Technical Data Sheet

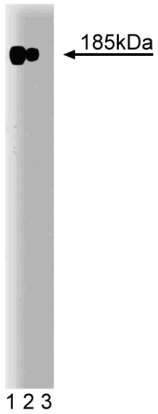
Purified Mouse Anti-Human ErbB2

Product Information

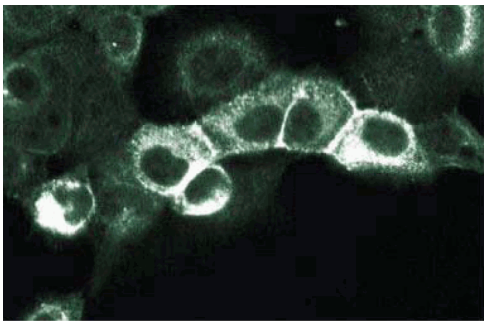
Material Number:	**610162**
Alternate Name:	Neu, Her-2
Size:	150 µg
Concentration:	250 µg/ml
Clone:	42/c-erbB-2
Immunogen:	Rat ErbB2 aa. 182-373
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Human
Target MW:	185 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

ErbB2 (Neu or Her-2) is a member of the erbB family of growth factor receptors. These factors possess constitutive tyrosine kinase activity and are commonly overexpressed in breast and ovarian carcinomas. While other erbB family members' ligands, such a EGF and NDF, are well characterized, a natural ligand for erbB2 remains unknown. ErbB2 forms heterodimers with erbB1/EGFR, erbB3, and erbB4, and can modulate their ligand affinities. Thus, erbB2 alters the intracellular responses elicited by EGF and NDF. This control is due to the fact that erbB2, when in complex with another erbB family receptor, decelerates the rate of ligand dissociation. Therefore, erbB2 may act as a signaling subunit for other receptors rather than a true growth factor receptor. Due to high sequence homology, this antibody may cross-react with the 180 kDa EGFR.



Western blot analysis ErbB2 on a A431 cell lysate (Human epithelial carcinoma; ATCC CRL-1555). *Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10,000 dilution of the Mouse Anti-Human ErbB2 antibody.*



Immunofluorescence staining of A431 cells (Human epithelial carcinoma; ATCC CRL-1555).

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Dillon C, Creer A, Kerr K, Kumin A, Dickson C. Basolateral targeting of ERBB2 is dependent on a novel bipartite juxtamembrane sorting signal but independent of the C-terminal ERBIN-binding domain. *Mol Cell Biol.* 2002; 22(18):6553-6563. (Biology: Western blot)

Graus-Porta D, Beerli RR, Hynes NE. Single-chain antibody-mediated intracellular retention of ErbB-2 impairs Neu differentiation factor and epidermal growth factor signaling. *Mol Cell Biol.* 1995; 15(3):1182-1191. (Biology)

Piechocki MP, Pilon SA, Wei WZ. Complementary antitumor immunity induced by plasmid DNA encoding secreted and cytoplasmic human ErbB-2. *J Immunol.* 2001; 167(6):3367-3374. (Biology: Flow cytometry, Immunofluorescence)

Szollosi J, Balazs M, Feuerstein BG, Benz CC, Waldman FM. ERBB-2 (HER2/neu) gene copy number, p185HER-2 overexpression, and intratumor heterogeneity in human breast cancer. *Cancer Res.* 1995; 55(22):5400-5407. (Biology)

Xu W, Mimnaugh E, Rosser MF. Sensitivity of mature Erbb2 to geldanamycin is conferred by its kinase domain and is mediated by the chaperone protein Hsp90. *J Biol Chem.* 2001; 276(5):3702-3708. (Biology: Western blot)