

c-erbB-2 / HER-2 / neu Ab-4 (Clone N12)

Mouse Monoclonal Antibody

Cat. #MS-301-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-301-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-301-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-labeled Ab with BSA and Azide)

Description: *c-erbB-2*, second member (*c-erbB-2/HER-2/neu*) of the *c-erbB* family is a receptor tyrosine kinase. It exhibits extracellular domains with two cysteine-rich sequences, and a cytoplasmic tyrosine kinase domain flanked by large hydrophilic tails that carry several tyrosine autophosphorylation sites. Approximately 25% of primary breast and ovarian tumors were found to overexpress the protein

Comments: Ab-4 reacts with the intact cells,^{1,2} shows moderate effect on *c-erbB-2* internalization,¹ slightly increases (~2-fold) the tyrosine kinase activity,¹ and inhibits (~90%) the tumorigenic growth in CD1/nude mice of N87 human gastric carcinoma cell line overexpressing *c-erbB-2*.^{1,2,3}

Mol. Wt. of Antigen: 185kDa

Epitope: Extracellular domain

Species Reactivity: Human.^{1,2,3} Does not react with mouse and rat. Others-not tested

Clone Designation: N12

Ig Isotype: IgG₁

Immunogen: Intact SKBR-3 breast cancer cells¹

Applications and Suggested Dilutions:

- Inhibits Tumor Growth (~90%^{1,2,3}) (Order Ab without sodium azide)
- Inhibits Cell Proliferation¹ (Order Ab without sodium azide)
- Effect on *c-erbB-2* Internalization (Moderate^{1,3})
- Electron Microscopy²
- Immunoprecipitation (Not suitable)
- Immunofluorescence
- Immunohistology (Frozen only)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: SKBR-3 cells, or breast carcinomas

Cellular Localization: Cell membrane

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Key References:

1. Stancovski I *et al.* Proceedings of the National Academy of Sciences, 1991, 88(19):8691-5.
2. Hurwitz E *et al.* Proceedings of the National Academy of Sciences, 1995, 92(8):3353-7.
3. Klapper LN, *et al.* Oncogene, 1997, 14(17):2099-109.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

