

**ErbB2/HER2 (C-term) Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog #1149-1

Clone ID: V2 **Lot #:** Please refer to the vial
Quantity: 100 µl
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: Human Mouse Rat
Applications: IHC ICC n/d Flow Cytometry IP
Molecular Wt.: 180 kDa
UniProt ID: P04626

Background: ErbB2/HER2 is one of the four members of the ErbB receptor family of transmembrane receptor-like tyrosine kinases (1). The kinase activity of ErbB2 can be activated without ligand if it is overexpressed, and by association with other ErbB proteins (2). Overexpression of ErbB2 is detected in almost 40% of human breast cancers (3). Binding of c-Cbl ubiquitin ligase to Tyr1112 of ErbB2 leads to poly-ubiquitination of ErbB2 and enhances its degradation (4). ErbB2 is one of the major targets for the treatment of breast cancer and other carcinomas.

Specificity: A synthetic peptide corresponding to residues of human ErbB2 was used as immunogen.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

IHC: 1:500
ICC : 1:500
IP: 1:80

Background References:

1. Muthuswamy, S. K., et al. Controlled dimerization of ErbB receptors provides evidence for differential signaling by homo- and heterodimers. *Mol. Cell. Biol.* 19: 6845–6857 (1999).
2. Qian, X., et al. Heterodimerization of epidermal growth factor receptor and wild-type or kinase-deficient Neu: a mechanism of interreceptor kinase activation and transphosphorylation. *Proc. Natl. Acad. Sci. USA* 91: 1500–1504 (1994).
3. Dittadi, R. and M. Gion. More about: prognostic importance of low c-erbB2 expression in breast tumors. *J. Natl. Cancer Inst.* 92: 1443–1444 (2000).
4. Klapper, L. N., et al. Tumor-inhibitory antibodies to HER-2/ErbB-2 may act by recruiting c-Cbl and enhancing ubiquitination of HER-2. *Cancer Res.* 60: 3384–3388 (2000).

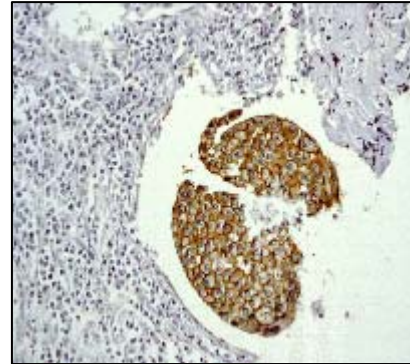


Fig 2. Immunohistochemical staining of paraffin-embedded human breast ductal carcinoma in situ using anti-ErbB2/HER2 RabMAb (cat. #1149-1).

Product QC'd by: _____

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit www.epitomics.com.