# Rabbit Monoclonal Antibody - Purified

Catalog no. 700635

(See product label for lot information)

Clone/PAD: 40H87L57

Isotype: IqG Gene ID: 2064 P04626 Protein Acc. no.: Qtv: 100 µg Volume: 200 µl Concentration: 0.5 mg/mL

### **Formulation**

PBS + 0.09% sodium azide

### Validation

See www.invitrogen.com/antibodies for protocols Validated for use in WB

# Reactivity

This antibody is specific for pY1248 and does not recognize non-phosphorylated erbB-2 protein.

#### **Immunogen**

peptide

# Immunogen sequence

TAENPE[pY]LGLDVPV

#### **Sequence Identity**

human, mouse, rat, rhesus monkey, feline, canine, frog, chicken

# **Sequence Homology**

N/A

# **Expected Reactivity**

Based on sequence identity and similarity. reactivity to human, mouse, rat, rhesus monkey, feline, canine, frog, chicken and is expected.

# Storage

2-8°C for up to 1mo, -20°C for long term Avoid repeated freezing and storage. thawing.

# **Expiration Date**

Expires one year from date of receipt when stored as instructed.

# **Background**

ERBB2, a 185 kDa transmembrane protein, is one of four ERBB receptor tyrosine kinases belonging to the Epidermal Growth Factor Receptor (EGFR) family (1). These receptor tyrosine kinases play an important role during cardiovascular and nervous system development (2-3). In both cardiovascular and nervous system development, cell communication and signaling require ERBB family proteins and overexpression of ERBB2 has been found in a variety of human cancer models (2-3). ERBB receptor tyrosine kinases have an extracellular domain involved in ligand binding and receptor homo- or heterodimerization (1). ERBB2 has also been shown to be the preferred receptor for heterodimerization with the other three ERBB proteins (1).

#### References

Birchmeier C (2009) ErbB receptors and the development of the nervous system. Exp Cell Res. 4: 611-18.

Muthuswamy SK et al (1999) Controlled dimerization of ErbB receptor provides evidence for differential signaling by homo- and heterodimers. Mol Cell Biol. 10:

Pentassuglia L and Sawyer DB (2009) The role of Neuregulin-1beta/ErbB signaling in the heart. Exp Cell Res. 4: 627-37.

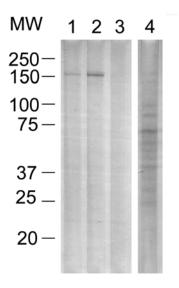
# **Applications:**

|                      | Species | Test Material | Concentration   |
|----------------------|---------|---------------|-----------------|
| Western Blotting     | human   | A431+EGF      | 2.0 μg/ml       |
| Immunoprecipitation  |         |               | Not Tested      |
| Immunohistochemistry |         |               | Not Tested      |
| Immunofluorescence   |         |               | Not Recommended |
| Flow Cytometry       |         |               | Not Tested      |
| ELISA                |         |               | Not Tested      |

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Western blot of A431+EGF cell lysates labeled with rabbit antierbB-2 [pY1248] (Cat. No. 700044).

Rabbit anti-erbB-2 [pY1248] was used at 2 ug/ml to detect erbB-2 [pY1248] in A431 cell lysates. Lysates were from untreated (lane 4) or treated cells that were serum starved overnight before addition of 200 ng/mL EGF for 30 minutes (lanes 1-3). The antibody was preincubated with the non-phosphopeptide (2) or the phosphopeptide (3) before detection of erbB-2 [pY1248] in treated lysate.

#### **Explanation of symbols**

| Explanation of symbols |   |          |  |  |  |
|------------------------|---|----------|--|--|--|
| Symbol                 | Description   | Symbol   | Description                                  |  |  |
| REF                    | Catalogue Number  | LOT      | Batch code                                   |  |  |
| RUO                    | Research Use Only   | IVD      | In vitro diagnostic medical device           |  |  |
| $\overline{X}$         | Use by  | ł        | Temperature limitation                       |  |  |
| ***                    | Manufacturer  | EC REP   | European Community authorised representative |  |  |
| [-]                    | Without, does not contain   | [+]      | With, contains                               |  |  |
| from Light             | Protect from light  | <u>^</u> | Consult accompanying documents               |  |  |
| $\bigcap_{i}$          | Directs the user to consult instructions for use (IFU), accompanying the product. |          |  |  |  |

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