

**#4795** Store at -20°C

## HER4/ErbB4 (111B2) Rabbit mAb


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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| WB, IP        | H M         | Endogenous   | 180       | Rabbit IgG      | #Q15303     | 2066            |

|  |  |                                   |
|--|--|-----------------------------------|
| <b>Product Usage Information</b>                                   | <b>Application</b><br>Western Blotting<br>Immunoprecipitation  | <b>Dilution</b><br>1:1000<br>1:50 |
| <b>Storage</b>   | Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.   |                                   |
| <b>Specificity / Sensitivity</b>                                   | HER4/ErbB4 (111B2) Rabbit mAb detects endogenous levels of ErbB4 protein. This antibody does not cross-react with other ErbB family members.   |                                   |
| <b>Species predicted to react based on 100% sequence homology:</b> | Rat  |                                   |
| <b>Source / Purification</b>                                       | Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy-terminus of human ErbB4.   |                                   |
| <b>Background</b>  | Research studies have implicated the HER/ErbB receptor tyrosine kinase family in normal development, cardiac function and cancer (1,2). HER4/ErbB4, like other family members, has four ectodomains, a single transmembrane domain and a cytoplasmic tail containing the active tyrosine kinase domain (3). By binding to neuregulins and/or EGF family ligands, ErbB4 forms either a homodimer or heterodimer with other ErbB family members, which results in receptor activation and signaling (3). ErbB4 is ubiquitously expressed with the highest expression occurring in brain and heart. The expression of ErbB4 in breast cancer, pediatric brain cancer and other types of carcinomas has been reported in research studies suggesting that ErbB4 expression is involved in both normal tissue development and carcinogenesis (3). |                                   |
| <b>Background References</b>                                       | 1. Holbro, T. and Hynes, N.E. (2004) <i>Annu Rev Pharmacol Toxicol</i> 44, 195-217.<br>2. Roskoski, R. (2004) <i>Biochem Biophys Res Commun</i> 319, 1-11.<br>3. Carpenter, G. (2003) <i>Exp Cell Res</i> 284, 66-77.  |                                   |

|                               |   |
|-------------------------------|---|
| <b>Species Reactivity</b>     | Species reactivity is determined by testing in at least one approved application (e.g., western blot).  |
| <b>Western Blot Buffer</b>    | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.  |
| <b>Applications Key</b>       | <b>WB:</b> Western Blotting <b>IP:</b> Immunoprecipitation  |
| <b>Cross-Reactivity Key</b>   | <b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected  |
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