

#4792 Store at -20°C

HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific)

100 µl
 (100 sections)



Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

rev. 07/20/10

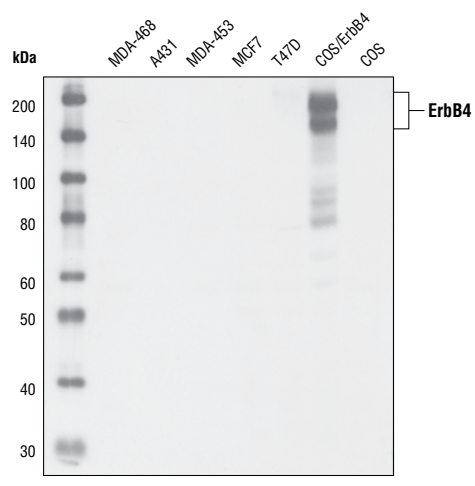
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IHC-P Transfected	H, (M)	180 kDa	Rabbit IgG**

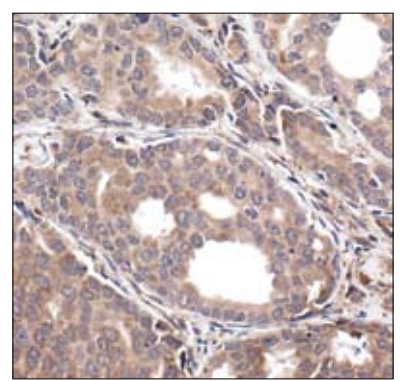
Background: The HER/ErbB receptor tyrosine kinase family has been implicated in normal development, cardiac function and cancer (1,2). HER4/ErbB4, like other family members, has four ectodomains, a single transmembrane domain and a cytoplasmic tail containing the active tyrosine kinase domain (3). By 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 suggesting that ErbB4 expression is involved in both normal tissue development and carcinogenesis (3).

Specificity/Sensitivity: HER4/ErbB4 (111B2) Rabbit mAb detects transfected levels of ErbB4 protein. This antibody does not cross-react with other ErbB family members.

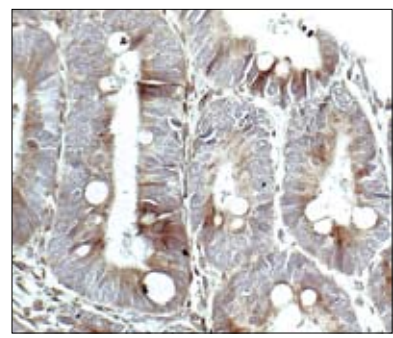
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human ErbB4.



Western blot analysis of cell extracts from various cell lines, using HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific). This antibody specifically detects overexpressed HER4/ErbB4 proteins in transfected Cos cells, but does not cross-react with EGFR (A431 and MDA-468), ErbB2 (MDA-453) and ErbB3 (MCF7 and T47D) proteins.



Immunohistochemical analysis of paraffin-embedded human prostate carcinoma using HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific).



Immunohistochemical analysis of paraffin-embedded human colon carcinoma using HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific).

Entrez-Gene ID #2066
Swiss-Prot Acc. #Q15303

Storage: 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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunohistochemistry (Paraffin)	1:320
Unmasking buffer:	EDTA
Antibody diluent:	TBST-5%NGS

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

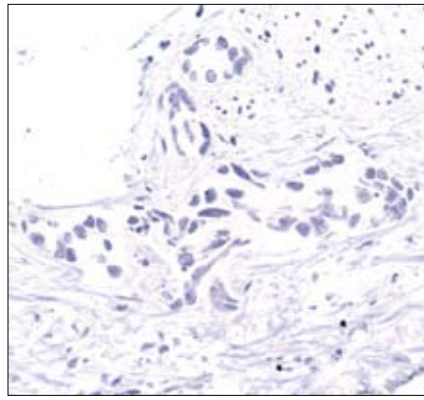
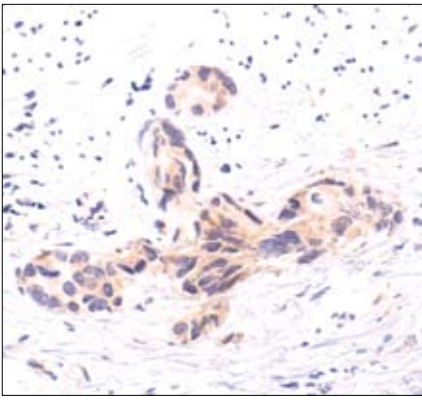
Background References:

- Holbro, T. and Hynes, N.E. (2004) *Annu. Rev. Pharmacol. Toxicol.* 44, 195–217.
- Roskoski Jr, R. (2004) *Biochem. Biophys. Res. Commun.* 319, 1–11.
- Carpenter, G. (2003) *Exp. Cell Res.* 284, 66–77.

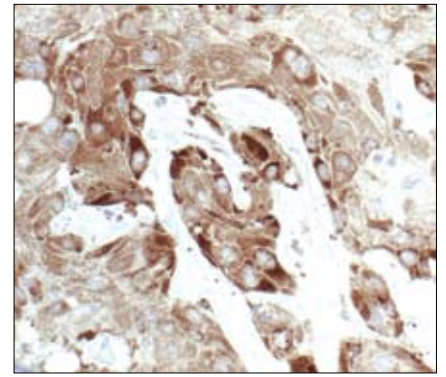
IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

© 2010 Cell Signaling Technology, Inc. Rabbit monoclonal antibody is produced under license (granting certain rights including those under U. S. Patents No. 5,675,063 and 7,429,487) from Epitomics, Inc.



Immunohistochemical analysis of paraffin-embedded human prostate carcinoma, using HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific) #4792 in the presence of control peptide (left) or HER4/ErbB4 Blocking Peptide (right).



Immunohistochemical analysis of paraffin-embedded human squamous cell carcinoma of the esophagus, showing cytoplasmic localization, using HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific).