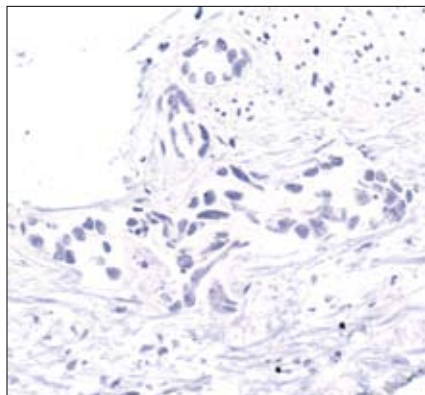
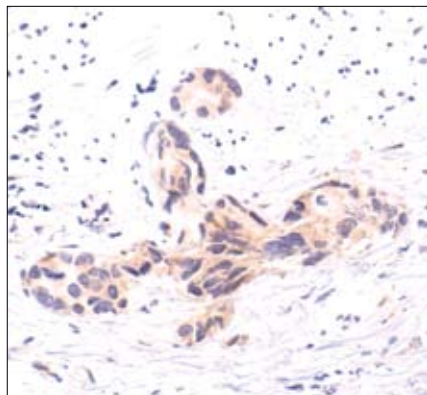


HER4/ErbB4 Blocking Peptide

✓ 100 µg

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rev. 09/14/07



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).

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).

Description: This peptide is used to block HER4/ErbB4 (83B10) Rabbit mAb (IHC specific) #4792 reactivity.

Quality Control: The quality of the peptide was evaluated by reverse-phase HPLC and by mass spectrometry. The peptide blocks HER4/ErbB4 (83B10) Rabbit mAb (IHC specific) Ab #4792 signal in immunohistochemistry.

Applications: Use as a blocking reagent to evaluate the specificity of antibody reactivity in immunohistochemistry protocols.

Directions for Use: For Immunohistochemistry, add twice the volume of peptide as volume of antibody used in 100 µl total volume. Incubate for a minimum of 30 minutes prior to adding the entire volume to the slide. Recommended antibody dilution can be found on the HER4/ErbB4 (83B10) Rabbit mAb (IHC Specific) #4792 data sheet.

Background References:

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

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

Companion Products:

HER4/ErbB4 (83B10) Rabbit mAb (IHC specific) #4792