BACKGROUND
The EGF receptor family comprises several related receptor tyrosine kinases that are frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3), and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. Neu, a glycoprotein, undergoes transactivation upon heterodimerization with other EGF receptor family members. Neu heterodimerization with ErbB-3 recruits heparin, which induces phosphoinositide PI3-kinase activation. Activation of Neu potentiates tumor cell motility and protease secretion and invasion, and also modulates cell cycle checkpoint function, DNA repair and apoptotic responses. Amplification and/or overexpression of Neu occurs in 20-30% of breast carcinomas. Measurement of increased Neu expression can be a predictor of disease prognosis. Neu may also prove to be a promising target for therapeutic agents.

CHROMOSOMAL LOCATION
Genetic locus: ERBB2 (human) mapping to 17q12, ERBB4 (human) mapping to 2q34; Erbb2 (mouse) mapping to 11 D, Erbb4 (mouse) mapping to 1 C3.

SOURCE
Neu (C-18) is available as either rabbit (sc-284) or goat (sc-284-G) affinity purified polyclonal antibody raised against a peptide mapping to the C-terminus of Neu of human origin.

PRODUCT
Each vial contains either 100 µg (sc-284) or 200 µg (sc-284-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
Neu (C-18) is recommended for detection of Neu gp185 and ErbB-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:50-1:10 000), immunoprecipitation (starting dilution 1:50, dilution range 1:50-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RESEARCH USE
For research use only, not for use in diagnostic procedures.

PROTOCOLS
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

STORAGE
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA

SELECT PRODUCT CITATIONS


Try Neu (3B5): sc-33684 or Neu (A-2): sc-393712, our highly recommended monoclonal alternatives to Neu (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor®, 488 and Alexa Fluor® 647 conjugates, see Neu (3B5): sc-33684.