

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ErbB3/Her3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant human ErbB3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ErbB3/Her3 Ser20-His641 Accession # Q61526
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ErbB3, also called Her3 (human epidermal growth factor receptor 3) in humans, is a type I transmembrane glycoprotein that is a member of the ErbB family of tyrosine kinase receptors named for a viral oncogene (1-3). ErbB family members serve as receptors for the EGF family of growth factors (1-3). Mouse ErbB3 contains a 19 amino acid (aa) signal sequence, a 622 aa extracellular domain (ECD), a 24 aa transmembrane region, and a 677 aa cytoplasmic domain (4). Human ErbB3 has four isoforms created by intron read-through and truncation of the molecule (5). Three of these are secreted and at least one can inhibit ErbB3 activity (6). Little information is available concerning mouse ErbB3 isoforms. The mouse ErbB3 ECD shares 97%, 93%, 92%, 91%, 89% and 88% aa identity with rat, human, bovine, equine, canine and opossum ErbB3, respectively. ErbB3 is found in epithelial cell layers of gastrointestinal, reproductive, urinary, endocrine and nervous systems, skin and muscle (3). Among ErbB family members, only ErbB3 lacks a working kinase domain, requiring heterodimerization with another ErbB receptor for signaling (1-3). The heterodimer of ErbB3 with ErbB2, which has no known ligands of its own, is expressed in the majority of breast, skin, ovary and gastrointestinal tumors and transduces a highly mitogenic signal in response to neuregulin 1 (NRG1; heuregulin 1) or NRG2 (3, 7-9). These ligands also bind ErbB4 (1). Signaling is aided by the six consensus binding motifs for the SH2 domain and one for the SH3 domain of the regulatory p85 subunit of phosphoinositide 3-kinase (10, 11). Deletion studies in mice demonstrate non-redundant roles for ErbB3 in development of Schwann cells, neural crest cells and heart valves (12, 13). ErbB3, ErbB2 and neuregulin are all required for formation of the sympathetic nervous system (14).

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