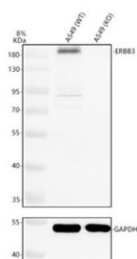


ERBB3 Antibody / EGFR Family Receptor Antibody (R30980)

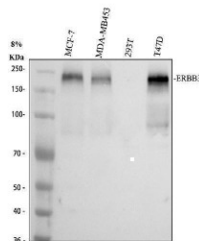
Catalog No.	Formulation	Size
R30980	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P21860
Applications	Western Blot : 0.5-1ug/ml
Limitations	This ERBB3 Antibody / EGFR Family Receptor Antibody is available for research use only.



ERBB3 Antibody Knockout Validation WB. Western blot analysis was performed using ERBB3 Antibody on lane 1: human A549 wild-type whole cell lysate and lane 2: human A549 ERBB3 knockout whole cell lysate. A strong immunoreactive band is detected at approximately 180 kDa in the wild-type sample, while the band is absent in the ERBB3 knockout lysate, confirming the specificity of the antibody for ERBB3. GAPDH served as the loading control and demonstrates equivalent protein loading between samples. This ERBB3 Antibody / EGFR Family Receptor Antibody has been validated using a knockout model, providing confidence for studies of EGFR family signaling, neuregulin-mediated receptor activation, and cancer-associated signal transduction.



ERBB3 Antibody Human Breast Cancer Cell WB. Western blot analysis was performed using ERBB3 Antibody on lane 1: human MCF-7, lane 2: human MDA-MB453, lane 3: human 293T, and lane 4: human T-47D whole cell lysates. A prominent immunoreactive band is detected at approximately 180 kDa in MCF-7, MDA-MB453, and T-47D cells, while little to no ERBB3 expression is observed in 293T cells. The detected band is consistent with the heavily glycosylated mature ERBB3 receptor commonly observed at a higher apparent molecular weight than its predicted size. This ERBB3 Antibody / EGFR Family Receptor Antibody is well suited for Western blot studies of EGFR family signaling, receptor dimerization, neuregulin-mediated activation, and cancer biology.

Description

ERBB3 Antibody / EGFR Family Receptor Antibody recognizes ERBB3, a member of the epidermal growth factor receptor (EGFR/ErbB) family of receptor tyrosine kinases that regulates cell proliferation, differentiation, survival, and tissue development. Unlike other members of the EGFR family, ERBB3 possesses greatly reduced intrinsic kinase activity and depends on heterodimerization with signaling partners, particularly ERBB2, to initiate downstream signaling. Upon binding neuregulin family ligands, ERBB3-containing receptor complexes activate major intracellular pathways including phosphoinositide 3-kinase (PI3K)/AKT and mitogen-activated protein kinase (MAPK), making ERBB3 a central regulator of normal development and disease progression. An ERBB3 Antibody is widely used to investigate receptor signaling, growth factor responses, and mechanisms of oncogenic activation.

ERBB3 is expressed in numerous epithelial, neuronal, and glandular tissues where it contributes to embryonic development, organogenesis, and maintenance of normal cellular homeostasis. Within the EGFR receptor family, ERBB3 serves as an essential signaling partner because its cytoplasmic domain contains multiple phosphoinositide 3-kinase docking sites despite its limited catalytic activity. This unique biology allows ERBB3 to function as a potent signaling amplifier following receptor dimerization, particularly with ERBB2. Researchers frequently analyze ERBB3 together with EGFR, ERBB2, and ERBB4 to better understand receptor crosstalk, ligand-dependent activation, and growth factor signaling networks. An ERBB3 Antibody therefore provides an important tool for investigating receptor interactions and downstream signaling events within the EGFR family.

Dysregulated ERBB3 signaling has been implicated in numerous human malignancies, including breast, lung, colorectal, gastric, ovarian, prostate, and head and neck cancers. Increased ERBB3 expression or activation has been associated with tumor progression, metastatic potential, resistance to EGFR- and ERBB2-targeted therapies, and reduced patient survival in several cancer types. As therapeutic strategies targeting the EGFR family continue to evolve, ERBB3 has emerged as an important biomarker for understanding treatment response, adaptive resistance, and receptor network signaling. Because this rabbit polyclonal antibody has been validated using knockout controls, researchers can utilize it with increased confidence when evaluating ERBB3 expression across experimental models. Consequently, an ERBB3 Antibody is valuable for oncology, signal transduction, and translational research applications.

ERBB3 is routinely analyzed using Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation, and flow cytometry to evaluate receptor expression, localization, and regulation during normal physiology and disease. As a key member of the EGFR receptor family, ERBB3 remains an important biomarker for studies of growth factor signaling, receptor dimerization, and targeted cancer therapeutics. NSJ Bioreagents provides carefully validated antibodies to support these applications across multiple experimental systems. An ERBB3 Antibody / EGFR Family Receptor Antibody provides researchers with a reliable reagent for investigating receptor biology, neuregulin signaling, oncogenic pathways, and EGFR family-mediated cellular responses.

For detection of total HER3 expression, see our [HER3 antibody page](#).

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the ERBB3 Antibody / EGFR Family Receptor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human ERBB3/HER3 (DWRDIVRDRDAEIVVKDNGR) was used as the immunogen for this ERBB3 antibody.

Storage

After reconstitution, the ERBB3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

ERBB3 antibody, EGFR Family Receptor antibody, HER3 antibody, Receptor Tyrosine Protein Kinase erbB3 antibody