10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-ERBB3 / HER3 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1376a

Specification

Goat Anti-ERBB3 / HER3 Antibody - Product Information

Application	**WB**
Primary Accession	P21860
Other Accession	NP_001973, 2065, 13867 (mouse), 29496 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**148098**

Goat Anti-ERBB3 / HER3 Antibody - Additional Information

Gene ID 2065

Other Names
Receptor tyrosine-protein kinase erbB-3, 2.7.10.1, Proto-oncogene-like protein c-ErbB-3, Tyrosine kinase-type cell surface receptor HER3, ERBB3, HER3

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ERBB3 / HER3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ERBB3 / HER3 Antibody - Protein Information

Name ERBB3

Synonyms HER3

Function
Tyrosine-protein kinase that plays an essential role as cell surface receptor for neuregulins. Binds to neuregulin-1 (NRG1) and is activated by it; ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase

(PubMed:20682778). May also be activated by CSPG5 (PubMed:15358134). Involved in the regulation of myeloid cell differentiation (PubMed:27416908).

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein

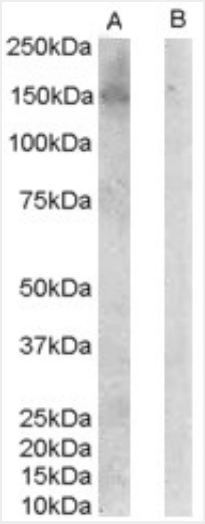
Tissue Location
Epithelial tissues and brain.

Goat Anti-ERBB3 / HER3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ERBB3 / HER3 Antibody - Images



AF1376a (0.1 µg/ml) staining of Jurkat lysate (35 µg protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ERBB3 / HER3 Antibody - Background

This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of

its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized.

Goat Anti-ERBB3 / HER3 Antibody - References

Investigation of type 1 diabetes and coeliac disease susceptibility loci for association with juvenile idiopathic arthritis. Hinks A, et al. Ann Rheum Dis, 2010 Jul 20. PMID 20647273.
Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Nrdp1-mediated regulation of ErbB3 expression by the androgen receptor in androgen-dependent but not castrate-resistant prostate cancer cells. Chen L, et al. Cancer Res, 2010 Jul 15. PMID 20587519.
[Association of the polymorphisms of the ERBB3 and SH2B3 genes with type 1 diabetes] Nikitin AG, et al. Mol Biol (Mosk), 2010 Mar-Apr. PMID 20586186.