

# Rabbit Anti-Phospho-HER3

# SL3218R-FITC

Product Name:	Anti-Phospho-HER3 (Tyr1197)/FITC
Chinese Name:	FITC标记 <b>的磷酸化</b> HER3 <b>抗体</b>
Alias:	Her3/ErbB3(phospho-Tyr1197); p-HRE3 (Tyr1197); ErbB 3 (phospho Y1197); ERBB3; c erbB 3; c erbB3; ERBB3 protein; erbB3 S; Glial growth factor receptor; HER 3; HER3; LCCS2; MDA BF 1; MGC88033; p180 ErbB3; p45 sErbB3; p85 sErbB3; proto-oncogene-like protein c ErbB 3; proto-oncogene-like protein c ErbB3; receptor tyrosine protein kinase ERB3; Receptor tyrosine protein kinase erbB 3; Receptor tyrosine protein kinase erbB3; Tyrosine kinase type cell surface receptor HER3; ERBB3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	148kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human HER3 around the phosphorylation site of Tyr1197 [EE(p-Y)EY]
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background:

ErbB3 is a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. ErbB3 is a membrane-bound protein which has a neuregulin binding domain but not an active kinase domain. It can therefore bind this ligand but cannot convey a signal into the cell via 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. Isoform 2 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. Defects in ERBB3 are the cause of lethal congenital contracture syndrome type 2 (LCCS2); also called Israeli Bedouin multiple contracture syndrome type A. LCCS2 is an autosomal recessive neurogenic form of a neonatally lethal arthrogryposis that is associated with atrophy of the anterior horn of the spinal cord.

#### Function:

Binds and is activated by neuregulins and NTAK.

#### **Subunit:**

Monomer and homodimer. Heterodimer with each of the other ERBB receptors (Potential). Interacts with CSPG5, PA2G4, GRB7 and MUC1.

#### **Subcellular Location:**

Isoform 1: Cell membrane; Single-pass type I. membrane protein. Isoform 2: Secreted.

## Tissue Specificity:

Epithelial tissues and brain.

#### Post-translational modifications:

Ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase. Subject to autophosphorylation.

#### DISEASE:

Defects in ERBB3 are the cause of lethal congenital contracture syndrome type 2 (LCCS2) [MIM:607598]; also called Israeli Bedouin multiple contracture syndrome type A. LCCS2 is an autosomal recessive neurogenic form of a neonatally lethal arthrogryposis that is associated with atrophy of the anterior horn of the spinal cord. The LCCS2 syndrome is characterized by multiple joint contractures, anterior horn atrophy in the spinal cord, and a unique feature of a markedly distended urinary bladder. The phenotype suggests a spinal cord neuropathic etiology.

## Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor

subfamily.

Contains 1 protein kinase domain.

## Database links:

Entrez Gene: 2065Human

Entrez Gene: 13867 Mouse

Entrez Gene: 29496Rat

Omim: 190151Human

SwissProt: P21860Human

SwissProt: Q61526Mouse

SwissProt: Q62799Rat

<u>Unigene: 118681</u>Human

Unigene: 373043 Mouse

Unigene: 10228Rat

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.