

Immunotag™ HER4 Antibody

Antibody Specification	
Catalog No.	ITA1994
Product Description	Immunotag™ HER4 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	HER4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1000 IHC 1:50-1:200 IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human HER4
Specificity	HER4 Antibody detects endogenous levels of total HER4
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	ERBB4
Accession No.	Q15303

Antibody Specification

Alternate Names	4ICD; ALS19; Avian erythroblastic leukemia viral oncogene homolog 4; Avian erythroblastic leukemia viral v erb b2 oncogene homolog 4; E4ICD; EC 2.7.10.1; Erbb4; ERBB4 intracellular domain; ERBB4_HUMAN; HER 4; HER4; human epidermal growth factor receptor 4; Mer4; MGC138404; Oncogene ERBB4; p180erbB4; Proto-oncogene-like protein c-ErbB-4; Receptor protein tyrosine kinase erbB 4 precursor; Receptor tyrosine protein kinase erbB 4; s80HER4; Tyrosine kinase type cell surface receptor HER4; Tyrosine kinase-type cell surface receptor HER4; v erb a avian erythroblastic leukemia viral oncogene homolog like 4; v erb a erythroblastic leukemia viral oncogene homolog 4; v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian); V-ERB-B2 avian erythroblastic leukemia viral oncogene homolog 4; Verba avian erythroblastic leukemia viral oncogene homolog like 4; Verba erythroblastic leukemia viral oncogene homolog 4; VERBB2;
Description	Tyrosine-protein kinase that plays an essential role as cell surface receptor for neuregulins and EGF family members and regulates development of the heart, the central nervous system and the mammary gland, gene transcription, cell proliferation, differentiation, migration and apoptosis. Required for normal cardiac muscle differentiation during embryonic development, and for postnatal cardiomyocyte proliferation. Required for normal development of the embryonic central nervous system, especially for normal neural crest cell migration and normal axon guidance. Required for mammary gland differentiation, induction of milk proteins and lactation. Acts as cell-surface receptor for the neuregulins NRG1, NRG2, NRG3 and NRG4 and the EGF family members BTC, EREG and HBEGF. Ligand binding triggers receptor dimerization and autophosphorylation at specific tyrosine residues that then serve as binding sites for scaffold proteins and effectors. Ligand specificity and signaling is modulated by alternative splicing, proteolytic processing, and by the formation of heterodimers with other ERBB family members, thereby creating multiple combinations of intracellular phosphotyrosines that trigger ligand- and context-specific cellular responses. Mediates phosphorylation of SHC1 and activation of the MAP kinases MAPK1/ERK2 and MAPK3/ERK1. Isoform JM-A CYT-1 and isoform JM-B CYT-1 phosphorylate PIK3R1, leading to the activation of phosphatidylinositol 3-kinase and AKT1 and protect cells against apoptosis. Isoform JM-A CYT-1 and isoform JM-B CYT-1 mediate reorganization of the actin cytoskeleton and promote cell migration in response to NRG1. Isoform JM-A CYT-2 and isoform JM-B CYT-2 lack the phosphotyrosine that mediates interaction with PIK3R1, and hence do not phosphorylate PIK3R1, do not protect cells against apoptosis, and do not promote reorganization of the actin cytoskeleton and cell migration. Proteolytic processing of isoform JM-A CYT-1 and isoform JM-A CYT-2 gives rise to the corresponding soluble intracellular domains (4ICD) that translocate to the nucleus, promote nuclear import of STAT5A, activation of STAT5A, mammary epithelium differentiation, cell proliferation and activation of gene expression. The ERBB4 soluble intracellular domains (4ICD) colocalize with STAT5A at the CSN2 promoter to regulate transcription of milk proteins during lactation. The ERBB4 soluble intracellular domains can also translocate to mitochondria and promote apoptosis.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.