



Human ERBB2 peptide (DAG-P0464)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized. [provided by RefSeq, Jul 2008]
Specificity	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	ERBB2 v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2 [Homo sapiens (human)]
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Official Symbol	ERBB2
Synonyms	ERBB2; v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2; NEU; NGL; HER2; TKR1; CD340; HER-2; MLN 19; HER-2/neu; receptor tyrosine-protein kinase erbB-2; herstatin; p185erbB2; proto-oncogene Neu; c-erb B2/neu protein; proto-oncogene c-ErbB-2; metastatic lymph node gene 19 protein; neuro/glioblastoma derived oncogene homolog; tyrosine kinase-type cell surface receptor HER2; neuroblastoma/glioblastoma derived oncogene homolog; v-erb-b2 avian erythroblastic leukemia viral oncoprotein 2; v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog;
Entrez Gene ID	2064
mRNA Refseq	NM_001005862.2
Protein Refseq	NP_001005862.1
UniProt ID	P04626
Chromosome Location	17q12
Pathway	Adaptive Immune System, organism-specific biosystem; Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Axon guidance, organism-specific biosystem; Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem; Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Constitutive PI3K/AKT Signaling in Cancer, organism-specifi
Function	ATP binding; ErbB-3 class receptor binding; RNA polymerase I core binding; epidermal growth factor-activated receptor activity; contributes_to growth factor binding; identical protein binding; protein C-terminus binding; protein binding; protein dimerizat