Recombinant Human V-erb-b2 Erythroblastic Leukemia Viral Oncogene Homolog 3 (avian)

Cat. No. ERBB3-2514H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	RecombinantHuman V-erb-b2 Erythroblastic Leukemia Viral Oncogene Homolog 3 (avian)protein, was expressed in Human HEK293 cells and purified by SDS-PAGE andCoomassie blue staining
Species	Human
Source	HEK293
Description	This gene encodes amember of the epidermal growth factor receptor (EGFR) family of receptortyrosine kinases. This membrane-bound protein has a neuregulin binding domainbut not an active kinase domain. It therefore can bind this ligand but notconvey the signal into the cell through protein phosphorylation. However, itdoes form heterodimers with other EGF receptor family members which do havekinase activity. Heterodimerization leads to the activation of pathways whichlead to cell proliferation or differentiation. Amplification of this geneand/or overexpression of its protein have been reported in numerous cancers,including prostate, bladder, and breast tumors. Alternate transcriptionalsplice variants encoding different isoforms have been characterized. Oneisoform lacks the intermembrane region and is secreted outside the cell. Thisform acts to modulate the activity of the membrane-bound form. Additionalsplice variants have also been reported, but they have not been thoroughlycharacterized.
Preparation	HEK293T cells weretransiently transfected with MegaTran Transfection Reagent and

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	TrueORF cDNAplasmid. Transfected cells were cultured for 48-72 hrs before collection. Thecells were lysed in modified RIPA buffer (25mM Tris-HCl pH7.6, 150mM NaCl, 1%NP-40, 1mM EDTA, 1xProteinase inhibitor cocktail mix, 1mM PMSF and 1mMNa3VO4), and then centrifuged to clarify the lysate. Recombinant proteinswere purified through anti-DDK affinity columns. Protein concentration wasmeasured by BCA kit
Molecular Weight	146 kDa
Purity	> 80% asdetermined by SDS-PAGE and Coomassie blue staining
Concentration	> 50 ug/ml asdetermined by BCA
Buffer	10% glycerol, 100 mMglycine, 25 mM Tris-HCl, pH 7.3
Storage	Store at -80C. Avoidrepeated freeze-thaw cycles. Stable for 3 months from receipt of productsunder proper storage and handling conditions

GENE INFORMATION

Gene Name	ERBB3v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) [Homosapiens]
Official Symbol	ERBB3
Synonyms	ERBB3; v-erb-b2 erythroblasticleukemia viral oncogene homolog 3 (avian); LCCS2, lethal congenitalcontracture syndrome 2; receptor tyrosine-protein kinase erbB-3; HER3
Gene ID	2065

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mRNA Refseq	NM_001982
Protein Refseq	NP_001973
MIM	190151
Uniprot ID	P21860
Chromosome Location	12q13
Pathway	Calcium signaling pathway,organism-specific biosystem; Calcium signaling pathway, conserved biosystem;Endocytosis, organism-specific biosystem; Endocytosis, conserved biosystem;ErbB receptor signaling network, organism-specific biosystem;
Function	ATP binding; growth factor binding;growth factor binding; nucleotide binding; protein binding
PDB rendering based on 1m6b.	

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