Active Recombinant Human ERBB2 Protein, Fc-tagged, Alexa Fluor 555 conjugated

Cat. No. ERBB2-033HAF555 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HER2/ErbB2 Fc Chimera (rhHER2-Fc) Protein (AAA75493, 1-652aa), was expressed in human HEK293 cells with C-terminal human IgG1 Fc tag and Alexa Fluor 555 conjugated.
Species	Human
Source	HEK293
ProteinLength	1-652 aa
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]

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Bio-activity	Measured by its ability to block anti-ErbB2 mediated inhibition of SK-BR-3 Human breast carcinoma cell proliferation. The ED50 for this effect is typically 20-80 ng/mL in the presence of 0.6 μg/mL goat anti-hErbB2.
Molecular Mass	rhHER2-Fc was fused with Fc region of human IgG1 at C-terminal and has a calculated MW of 97.7 kDa. As a result of glycosylation, DTT-reduced protein migrates as 130-140 kDa polypeptide in SDS-PAGE.
N-terminal Sequence Analysis	Thr 23
Endotoxin	< 1.0 EU/ μg of the rhHER2-Fc by the LAL method.
Purity	> 95 % as determined by SDS-PAGE. All lots are greater than 95 % pure.
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 555 via amines With an excitation and emission maximum of 555/565 nm, Alexa Fluor 555 can be efficiently excited using a 543 nm He-Ne laser line and detected under standard TRITC/Cy3 filters.
Storage	Store at -20 centigrade in lyophilized state after receipt. For long term storage, upon reconstitution rhHER2-Fc should be aliquot and store at -20 centigrade or -8 centigrade centigrade. Avoid repeated freeze-thaw cycles.
Storage Buffer	Bulk protein in a 0.22 μm filtered solution of PBS, pH 7.4 and delivered as liquid formulation or lyophilized powder. Normally 5-8% trehalose and mannitol are added as protectants before lyophilization.
Conjugation	Alexa Fluor 555

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GENE INFORMATION

Gene Name	ERBB2 v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) [Homo sapiens]
Official Symbol	ERBB2
Synonyms	ERBB2; v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian); NGL, v erb b2 avian erythroblastic leukemia viral oncogene homolog 2 (neuro/glioblastoma derived oncogene homolog); receptor tyrosine-protein kinase erbB-2; CD340; HER 2; HER2; NEU; herstatin; p185erbB2; proto-oncogene Neu; c-erb B2/neu protein; proto-oncogene c-ErbB-2; metastatic lymph node gene 19 protein; tyrosine kinase-type cell surface receptor HER2; neuroblastoma/glioblastoma derived oncogene homolog; v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2 (neuro/glioblastoma derived oncogene homolog); NGL; TKR1; HER-2; MLN 19; HER-2/neu;
Gene ID	2064
mRNA Refseq	NM_001005862
Protein Refseq	NP_001005862
MIM	164870
UniProt ID	P04626

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