

# anti-EGFR (Cetuximab)

Cat# A510014

Upon receipt, store at -80°C. Avoid repeated freeze.

## INFORMATION

<b>Product Name</b>	anti-EGFR (Cetuximab)
<b>Cat. No.</b>	A510014
<b>Size</b>	1mg/5mg/20mg
<b>Isotype</b>	Human IgG1
<b>Description</b>	<p>Cetuximab biosimilar is a recombinant, human/mouse chimeric monoclonal antibody that binds specifically to the extracellular domain of the human epidermal growth factor receptor (EGFR). Cetuximab biosimilar is composed of the Fv regions of a murine anti-EGFR antibody with human IgG1 heavy and kappa light chain constant regions and has an approximate molecular weight of 152 kDa. EGFR is a 170 kD transmembrane glycoprotein that is part of the ErbB family of receptors within the protein kinase superfamily. EGFR is one of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). EGFR is essential for various processes including controlling cell growth and differentiation and ductal development of the mammary glands. Ligand binding induces dimerization and autophosphorylation. It consists of a glycosylated extracellular domain which binds to EGF and an intracellular domain with tyrosine-kinase activity necessary for signal transduction. TGF<math>\alpha</math>, vaccinia virus growth factor, and related growth factors can also bind to and signal through EGFR. Abnormal EGFR signaling has been implicated in inflammatory diseases such as psoriasis, eczema and atherosclerosis. Alzheimer's disease is linked with poor signaling of the EGFR and other receptor tyrosine kinases. Furthermore, over-expression of the EGFR is linked with the growth of various tumors. EGFR has been identified as an oncogene, a gene which in certain circumstances can transform a cell into a tumor cell, which has led to the therapeutic development of anticancer EGFR inhibitors. EGFR is a well-established target for both mAbs and specific tyrosine kinase inhibitors. Anti-Human EGFR (Cetuximab) utilizes the same variable regions from the therapeutic antibody Cetuximab making it ideal for research projects</p>
<b>Species Reactivity</b>	Human
<b>Cas No</b>	205923-56-4
<b>Host</b>	CHO cells

<b>Clonality</b>	Monoclonal
<b>Conjugate</b>	Non-conjugated
<b>Tested applications</b>	Functional Assay
<b>Molecular Weight</b>	152 kDa
<b>Purity</b>	>95%; < 0.75 EU/mg as determined by the LAL method
<b>Storage buffer</b>	0.01 M phosphate buffered saline (PBS) pH 7.2
<b>Storage instruction</b>	This solution is stable for at least 4 weeks when stored at 2-8°C. For long term storage aseptically aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.
<b>Alias</b>	C225

## **PRODUCT USE LIMITATION**

These products are intended for research use only.