

## 12-8068: Anti-Human EGFR (Cetuximab)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	C225
<b>Reactivity :</b>	Human
<b>Alternative Name :</b>	ErbB-1; HER1; epidermal growth factor receptor
<b>Isotype :</b>	Human IgG1k
<b>Immunogen Information :</b>	Human EGFR/ErbB1

### Description

Expression Host : HEK-293

Pathogen Testing : To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of this recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Cetuximab. Clone C225 recognizes human EGFR. This product is for research use only.

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 $\alpha$ , 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.

### Product Info

<b>Amount :</b>	50 $\mu$ g / 100 $\mu$ g
<b>Purification :</b>	$\geq$ 95% monomer by analytical SEC Concentration : $\geq$ 5.0 mg/ml
<b>Content :</b>	This biosimilar antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added.
<b>Storage condition :</b>	Functional grade biosimilar antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.

### Application Note

Endotoxin :  $\leq$  1.0 EU/mg as determined by the LAL method

The suggested concentration for Cetuximab biosimilar antibody for staining cells in flow cytometry is  $\leq$  0.25  $\mu$ g per 10<sup>6</sup> cells in a volume of 100  $\mu$ l. Titration of the reagent is recommended for optimal performance for each application.