



# Human Anti-Human EGFR (Cetuximab) Monoclonal Antibody, clone C225 [Biosimilar] (CABT-Z637H)

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

## PRODUCT INFORMATION

<b>Specificity</b>	Detects human EGFR. This non-therapeutic antibody uses the same variable region sequence as the therapeutic antibody Cetuximab.
<b>Immunogen</b>	Human EGFR/ErbB1
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Human
<b>Species Reactivity</b>	Human
<b>Clone</b>	C225
<b>Purification</b>	Protein A or G purified
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	FA
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	5 mg
<b>Buffer</b>	0.01 M phosphate buffered saline (PBS) pH 7.2, 150 mM NaCl with no carrier protein, potassium or preservatives added. BSA and Azide free. Endotoxin Level $\leq$ 0.75 EU/mg as determined by the LAL method

Preservative	None
Storage	Store at 2-8°C for short term; -80°C for long term. Avoid freeze / thaw cycle.
Ship	Wet ice

## BACKGROUND

Introduction	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.
Keywords	EGFR;epidermal growth factor receptor;epidermal growth factor receptor (avian erythroblastic leukemia viral (v erb b) oncogene homolog) , ERBB;ERBB1;erythroblastic leukemia viral (v erb b) oncogene homolog (avian);proto-oncogene c-ErbB-1

## GENE INFORMATION

Gene Name	EGFR
Entrez Gene ID	<a href="#">1956</a>
UniProt ID	<a href="#">P00533</a>