



# Human Anti-Human EGFR (Matuzumab) Monoclonal Antibody, clone Matuzumab [Biosimilar] (CABT-Z674H)

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

## PRODUCT INFORMATION

**Product Overview** This is a reformatted human IgG4 antibody based on the therapeutic Fab fragment.

**Immunogen** Domain III of the extracellular domain of human EGFR.

**Isotype** IgG1, κ

**Source/Host** Human

**Species Reactivity** Human

**Clone** Matuzumab

**Purification** Protein A purified

**Conjugate** Unconjugated

**Applications** FC, WB, BL

**Format** Liquid

**Concentration** Lot specific

**Size** 200 µg

**Buffer** PBS with 0.02% Proclin 300.

**Preservative** None

**Storage** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

## BACKGROUND

<b>Introduction</b>	Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin. Isoform 2 may act as an antagonist of EGF action.
<b>Keywords</b>	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

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