



Human Anti-Human EGFR (Panitumumab) Monoclonal Antibody, clone Panitumumab [Biosimilar] (CABT-Z699H)

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

PRODUCT INFORMATION

Specificity	Detects human EGFR. This non-therapeutic antibody uses the same variable region sequence as the therapeutic antibody Panitumumab.
Immunogen	Human EGFR.
Isotype	IgG2, κ
Source/Host	Human
Species Reactivity	Human
Clone	Panitumumab
Purification	Protein A or G purified
Conjugate	Functional Grade
Applications	FA
Format	Liquid
Concentration	Lot specific
Size	5 mg
Buffer	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	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.
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	1956
UniProt ID	P00533