



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 ≤ 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	<p>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.</p>
Keywords	<p>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</p>

GENE INFORMATION

Gene Name	EGFR
Entrez Gene ID	1956
UniProt ID	P00533