



Mouse Anti-Human EGFR monoclonal antibody, clone 2C21 [Biotin] (CABT-L4637)

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

PRODUCT INFORMATION

Target	Human EGFR
Immunogen	Full length human recombinant protein of human EGFR (NM_201283) produced in HEK293T cell.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	2C21
Conjugate	Biotin
Applications	LMNX
Format	Purified, Liquid
Concentration	Lot specific
Size	50 µg
Buffer	Stored in PBS (pH 7.4) with 0.05% sodium azide, 10mg/ml BSA, 50% glycerol
Preservative	0.05% sodium azide
Storage	Short Term: 2-8°C. Long Term: -20°C. Avoid repeated freezing and thawing.
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	ERBB; ERBB1; HER1; mENA; NISBD2; PIG61; epidermal growth factor receptor

GENE INFORMATION

Entrez Gene ID	1956
UniProt ID	P00533
