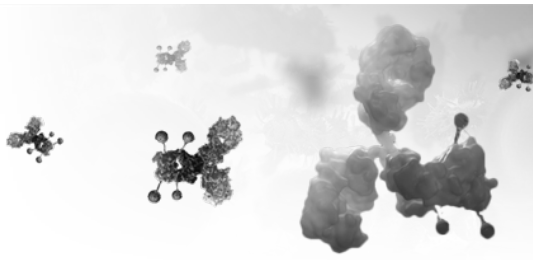

Mouse Anti-Human EGFR Monoclonal antibody, clone 225 (CABT-L4513)

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

PRODUCT INFORMATION

Product Overview	The 225 monoclonal antibody reacts with an epitope on the extracellular domain of human EGFR belongs to the ErbB family of receptors. EGFR signaling is activated upon binding one of its ligands including epidermal growth factor (EGF), transforming growth factor α (TGF α), Amphiregulin, and heparin binding EGF (HB-EGF). Upon activation, EGFR transitions from an inactive monomeric form to an active homodimer. This initiates several downstream signal transduction cascades including the MAPK, Akt and JNK pathways, leading to DNA synthesis and cell proliferation. EGFR overexpression or constitutive activation are associated with many cancers. For this reason, anti-EGFR monoclonal antibody mediated immunotherapies are currently being explored as cancer treatments. The 225 antibody has been reported to neutralize EGFR signaling.
Target	Human EGFR
Immunogen	Purified EGFR from A431 cells
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	225
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro EGFR blockade, in vivo EGFR blockade in xenografts, WB, FuncS

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Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. Multiple alternatively spliced transcript variants that encode different protein isoforms have been found for this gene.
Keywords	EGFR;epidermal growth factor receptor;ERBB;HER1;mENA;ERBB1;PIG61;OTTHUMP00000159661;OTTHUMP00000159662;OTTHUMP

GENE INFORMATION

Official Symbol	epidermal growth factor receptor
Synonyms	EGFR; epidermal growth factor receptor; ERBB; HER1; mENA; ERBB1; PIG61; OTTHUMP00000159661; OTTHUMP00000159662; OTTHUMP00000159663
References	Bessette, D. C., et al. (2015). "Using the MCF10A/MCF10CA1a Breast Cancer Progression Cell Line Model to Investigate the Effect of Active, Mutant Forms of EGFR in Breast Cancer Development and Treatment Using Gefitinib." PLoS One 10(5): e0125232. PubMed;

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