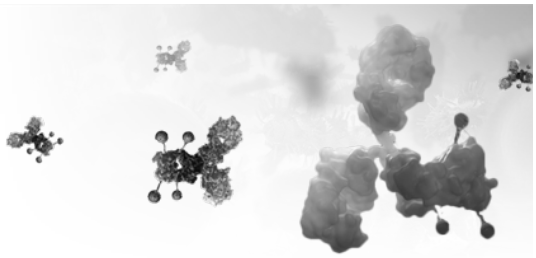

Mouse Anti-Human EGFR Monoclonal antibody, clone 528 (CABT-L4514)

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

PRODUCT INFORMATION

Product Overview	The 528 monoclonal antibody reacts with an epitope on the extracellular domain of human EGFR (epidermal growth factor receptor) also known as ErbB-1. EGFR is a 170 kDa cell-surface receptor and 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 528 antibody has been reported to block EGF binding to its receptor and inhibit A431 tumor formation in nude mice.
Target	Human EGFR
Immunogen	Purified EGFR from A431 cells
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	528
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade

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Applications	in vitro?EGFR blockade, in vivo?EGFR blockade in xenografts, WB, FuncS, IP, Immunohistochemistry (paraffin), IF, FC
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	Dong, A., et al. (2015). "Epidermal growth factor receptor (EGFR) signaling requires a specific endoplasmic reticulum thioredoxin for the post-translational control of receptor presentation to

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