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Product datasheet for TA386419

EGFR Rabbit Monoclonal Antibody [Clone ID: 2F8 (Zalutumumab; HuMax-EGFR)]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2F8 (Zalutumumab; HuMax-EGFR)
Applications:	ELISA, FC, WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG, kappa
Clonality:	Monoclonal
Immunogen:	The original monoclonal antibody was generated by immunizing HuMAb mice with alternating A431 cells and purified EGFR administration.
Specificity:	This antibody binds domain III of the human epidermal growth factor receptor (EGFR). This antibody blocks the binding of EGF and TGF-α to the EGFR. At saturating concentrations, 2F8 completely blocked EGF-R signaling and inhibited the in vitro proliferation of EGF-R-overexpressing A431 cells. At much lower concentrations, associated with low receptor occupancy, 2F8 induced efficient Ab-dependent cell-mediated cytotoxicity (ADCC) in vitro. In vivo studies showed potent antitumor effects in models with A431 tumor xenografts in athymic mice. Flow cytometry was used to analyze the binding of mAb 2F8 to EGFR overexpressing A431 cells. mAb 2F8 was found to bind to membrane-associated EGF-R with an EC50 of approximately 1 µg/ml (7 nM). The ability of mAb 2F8 to block ligand-induced receptor phosphorylation was determined using immunoblotting. ELISA was used to determine whether mAb 2F8 had a functional C1q binding cite (Bleeker et al., 2004). Phase I/II clinical trials and pharmacokinetic studies in patients with advanced squamous cell carcinoma of the head and neck revealsed that 2F8/HuMax-EGFR can be safely administered in doses upto 8 mg/kg (Bastholt et al., 2007) Antibody 2F8 binds the domain III of the EGFR and locks it into a very compact and inactice conformation. Biochemical analyses showed bivalent binding of 2F8 to provide potent inhibition of EGFR signaling (Beuren et al., 2008). EGFRvIII-specific CDC was significantly enhanced when zalutumumab was combined with a Fc-engineered variant of antibody MR1-1 (Klausz et al., 2011).
Formulation:	PBS with 0.02% Proclin 300.
Concentration:	lot specific

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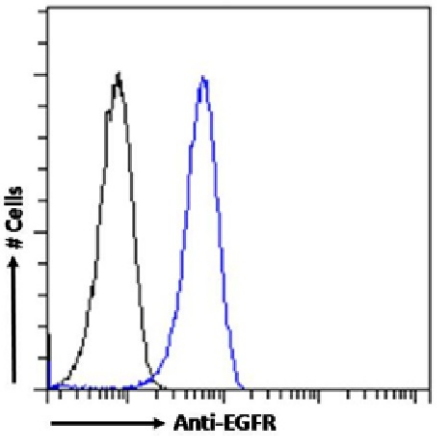
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	epidermal growth factor receptor
Database Link:	Entrez Gene 1956 Human P00533
Synonyms:	ERBB; ERBB1; HER1; mENA; PIG61
Note:	This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Product images:



Flow cytometry using the Anti-EGFR antibody 2F8 (Zalutumumab; HuMax-EGFR) (TA386419). Paraformaldehyde fixed A431 cells, permeabilized with 0.5% Triton were stained with anti-unknown specificity antibody ([TA385792]; isotype control, black line) or the rabbit IgG version of 2F8 (Zalutumumab; HuMax-EGFR) (TA386419, blue line) at a dilution of 1:100 for 1h at RT. After washing, the bound antibody was detected using a goat anti-rabbit IgG AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.