

Rabbit anti-Human EGFR Antibody | anti-EGFR antibody

Anti-EGFR [2F8 (Zalutumumab; HuMax-EGFR)], Rabbit IgG

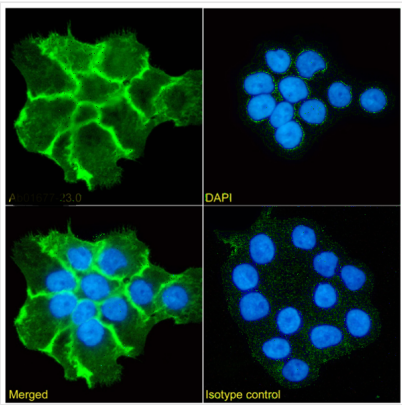
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72271	Rabbit	Human	Western Blot, ELISA, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

EGFR; Anti-EGFR [2F8 (Zalutumumab; HuMax-EGFR)]; Rabbit IgG; ERBB1; ERBB; Erb-B2; HER1; Epidermal growth factor receptor; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1; anti-EGFR antibody

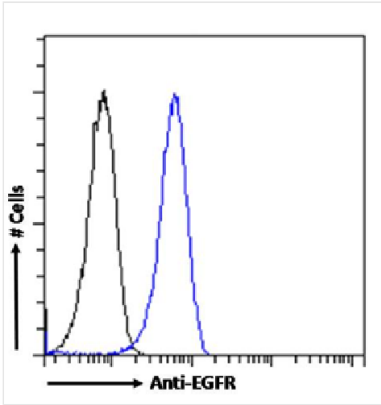
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Isotype	Rabbit IgG, Kappa
Clone Number	2F8 (Zalutumumab; HuMax-EGFR)
Specificity	This antibody binds domain III of the human epidermal growth factor receptor (EGFR).
Purity/Purification	Protein A affinity purified
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-EGFR antibody	WB (Western Blot), ELISA, FCM/FACS (Flow Cytometry)
Immunogen	The original monoclonal antibody was generated by immunizing HuMAb mice with alternating A431 cells and purified EGFR administration.
Chimeric Use Statement	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.
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



IF (Immunofluorescence)

Immunofluorescence staining of A431 cells with anti-EGFR (AAA72271)-2F8 (Zalututumumab; HuMax-EGFR) Immunofluorescence analysis of paraformaldehyde fixed A431 cells stained with the chimeric rabbit IgG version of 2F8 (Zalututumumab; HuMax-EGFR) (AAA72271-23.0)(1:100 dilution) for 1h followed by Alexa Fluor 488 secondary antibody (1:1000 dilution), showing cellular junction staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom AAA72271-23.0, DAPI, merged channels and an isotype control. The isotype control was an unknown specificity antibody followed by staining with Alexa Fluor 488 secondary antibody.



FCM/FACS (Flow Cytometry)

Flow cytometry using the Anti-EGFR antibody 2F8 (Zalututumumab; HuMax-EGFR) (AAA72271). Paraformaldehyde fixed A431 cells, permeabilized with 0.5% Triton were stained with anti-unknown specificity antibody or the rabbit IgG version of 2F8 (Zalututumumab; HuMax-EGFR) (AAA72271-23.0, 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.

ADDITIONAL INFORMATION

Related Product Information for anti-EGFR antibody	This antibody blocks the binding of EGF and TGF-alpha 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 ug/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 revealed 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).
Product Categories/Family for anti-EGFR antibody	tumor marker; Oncology; Cancer; biosimilar
References	Bleeker et al. Dual mode of action of a human anti-epidermal growth factor receptor monoclonal antibody for cancer therapy. J Immunol. (2004); 173(7):4699-707. PMID:15383606

NCBI AND UNIPROT INFORMATION

NCBI GI #	29725609
NCBI GeneID	1956
NCBI Accession #	NP_005219.2
NCBI GenBank Nucleotide #	NM_005228.3
UniProt Accession #	P00533; O00688; O00732; P06268; Q14225; Q68GS5; Q92795; Q9BZS2; Q9GZX1; Q9H2C9; Q9H3C9; Q9UMD7
Molecular Weight	134,277 Da
NCBI Official Full Name	epidermal growth factor receptor isoform a

NCBI Official Synonym Full Names	epidermal growth factor receptor
NCBI Official Symbol	EGFR
NCBI Official Synonym Symbols	ERBB; HER1; mENA; ERBB1; PIG61
NCBI Protein Information	epidermal growth factor receptor; proto-oncogene c-ErbB-1; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; receptor tyrosine-protein kinase erbB-1; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog
UniProt Protein Name	Epidermal growth factor receptor
UniProt Gene Name	EGFR
UniProt Synonym Gene Names	ERBB; ERBB1; HER1
UniProt Entry Name	EGFR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/rabbit-human-antibody/egfr/72271>