Anti-EGFR (Matuzumab), Human IgG1 Antibody

CATALOG NO: A1090-200

ALTERNATIVE NAMES: Epidermal Growth Factor Receptor, Proto-oncogene c-ErbB-1
Receptor tyrosine-protein kinase erbB-1

AMOUNT: 200 µg

IMMUNOGEN: Domain III of the extracellular domain of human EGRF

ISOTYPE / FORMAT: Human IgG1, kappa

CLONALITY: Monoclonal

SPECIES REACTIVITY: Human

FORM: Liquid

PURIFICATION: Affinity purified using Protein A

FORMULATION: Supplied in PBS with preservative (0.02% Proclin 300)

STORAGE CONDITIONS: Store at 4°C for up to 3 months. For long term storage, aliquot and freeze at -20°C. Avoid repeated freeze/thaw cycles.

DESCRIPTION: Recombinant monoclonal antibody to EGFR. Manufactured using recombinant technology with variable regions (i.e. specificity) from the therapeutic antibody Matuzumab. This antibody binds to human EGFR at a site distinct from the antigen binding site, preventing conformational re-arrangement required for dimerization, a process essential for high-affinity ligand binding.

BACKGROUND: 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, TGFα/TGF-α, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EBFG 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 EGFR receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin.

APPLICATION: Block; FC; WB


RELATED PRODUCTS:
- Anti-VEGF (Bevacizumab), humanized Antibody (Cat. No. A1045-100)
- Anti-HER2 (Trastuzumab), humanized Antibody (Cat. No. A1046-100)
- Anti-EGFR (Cetuximab), Chimeric Antibody (Cat. No. A1047-100)
- Anti-TNF-α (Adalimumab), humanized Antibody (Cat. No. A1048-100)
- Anti-CD20 (Rituximab), Chimeric Antibody (Cat. No. A1049-100)
- Anti-EGFR (Panitumumab), humanized antibody (Cat. No. A1050-100)
- Anti-OX40L (Oxelumab), Human IgG1 Antibody (Cat. No. A1088-200)
- Anti-CD11a (Eralizumab), Human IgG1 Antibody (Cat. No. A1089-200)
- Anti-CD4 (Clenoliximab), Human IgG4 Antibody (Cat. No. A1091-200)
- Anti-alpha 5 beta1 Integrin (Volociximab), Human IgG4 Antibody (Cat. No. A1092-200)
- Anti-TNF alpha (Humicade), Human IgG4 Antibody (Cat. No. A1093-200)
- Anti-CD40L (Ruplizumab), Human IgG1 Antibody (Cat. No. A1094-200)
- Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody (Cat. No. A1095-200)
- Anti-Carcinoembryonic antigen (Arcitumomab), Human IgG1 Antibody (Cat. No. A1096-200)
- Anti-TNF alpha (Infliximab), Human IgG1 Antibody (Cat. No. A1097-200)
- Anti-IL-2R alpha (CD25) (Basiliximab), Human IgG1 Antibody (Cat. No. A1098-200)
- Anti-IL-2R alpha (Daclizumab), Human IgG1 Antibody (Cat. No. A1099-200)

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