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Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab)

Recombinant Antibody
Catalog # APR10451

Specification

Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) - Product Information

Application	**FC, E, FTA**
Primary Accession	P00533
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**144.54 KDa**

Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) - Additional Information

Target/Specificity
ERBB1 / EGFR / HER1

Endotoxin
< 0.001EU/ μg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Storage
-80°C for 2 years under sterile conditions -20°C for 1 year under sterile conditions Avoid repeated freeze-thaw cycles.

Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) - Protein Information

Name EGFR (HGNC:3236)

Synonyms ERBB, ERBB1, HER1

Function
Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed:10805725, PubMed:27153536, PubMed:2790960, PubMed:35538033). Known

ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:12297049, PubMed:15611079, PubMed:17909029, PubMed:20837704, PubMed:27153536, PubMed:2790960, PubMed:7679104, PubMed:8144591, PubMed:9419975). 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 (PubMed:27153536). May also activate the NF-kappa-B signaling cascade (PubMed:11116146). Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling (PubMed:11602604). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:11483589). Positively regulates cell migration via interaction with CCDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration (PubMed:20462955). Plays a role in enhancing learning and memory performance (By similarity). Plays a role in mammalian pain signaling (long-lasting hypersensitivity) (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein Golgi apparatus membrane; Single-pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Endosome. Endosome membrane. Nucleus. Note=In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER (PubMed:17909029, PubMed:20674546). Endocytosed upon activation by ligand (PubMed:17182860, PubMed:17909029, PubMed:27153536, PubMed:2790960). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:20551055)

Tissue Location
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) - Images

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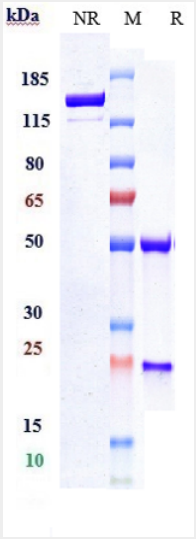
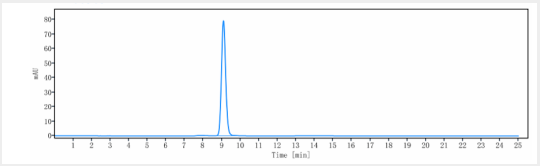
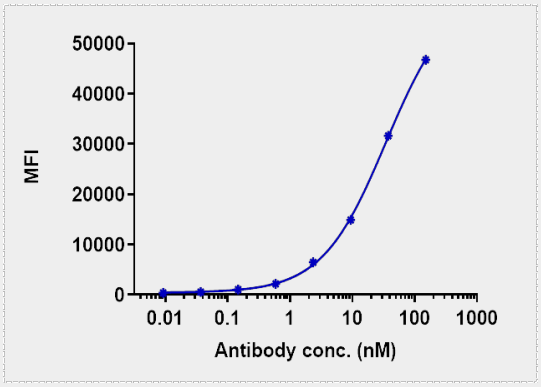


Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab)is more than 99.58% ,determined by SEC-HPLC.



Human EGFR CHO-K cells were stained with Anti-ERBB1 / EGFR / HER1 Reference Antibody (depatuxizumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC517=34.40 nM