

Product datasheet

Anti-EGFR antibody ab225693

1 Image

Overview

Product name	Anti-EGFR antibody
Description	Rabbit polyclonal to EGFR
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Zebrafish
Immunogen	Recombinant full length protein corresponding to Zebrafish EGFR aa 21-389.

Sequence:

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ATPEKKVCQGANNKLTLLGTVEDHYQVLLRMYRNCTVVLE
NLEITHITEK
YDLSFLKSIQEVGGYVLIAVNTVSKIPLNLRIRGHSLYEDK
FALAVLV
NYNNSIEQGVKELPLTSLTEILKGGVRFNMNNHLCNVGTIE
WADILNMKS
LPTVSHNISYGKNCGKCDPSCFNGSCWGTGPDKCQRMT
KVICAEQCSEGR
CKGPRPIDCCNEHCAAGCTGPRPTDCLACKDFQDEGTC
KDACPRLMLYDP
NTHQLAPNPYKYSFGATCIKTCPHNYVVDHGACVRTCS
PGTYEVDEGG
VRKCKRCEGLCPKGTQTDFCFISSLTNVMRLLLVLVY
RVSAGSKKVL KVHKSGCRNLRPLRSIKKS
    
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Database link: [F1RA48](#)

[Run BLAST with](#)

[Run BLAST with](#)

General notes

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is

Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituents: 50% Glycerol (glycerin, glycerine), PBS, 0.03% Proclin 300
Purity	Protein G purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab225693** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

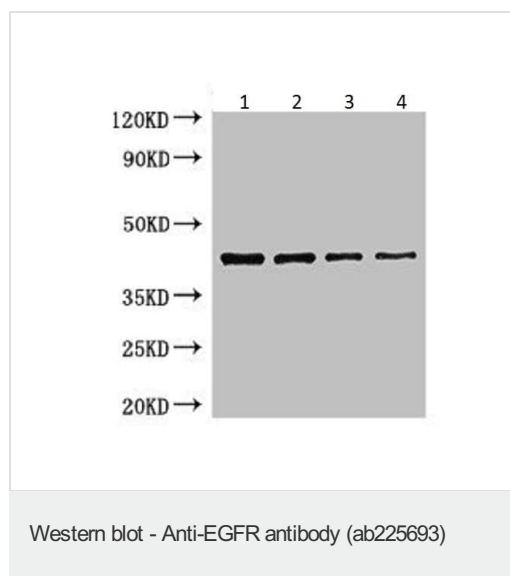
Application	Abreviews	Notes
WB		1/500 - 1/5000. Detects a band of approximately 43 kDa (predicted molecular weight: 43 kDa).

Target

Function	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, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG 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 EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin. Isoform 2 may act as an antagonist of EGF action.
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Tissue specificity	Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.
Involvement in disease	Lung cancer Inflammatory skin and bowel disease, neonatal, 2
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylation at Ser-695 is partial and occurs only if Thr-693 is phosphorylated. Phosphorylation at Thr-678 and Thr-693 by PRKD1 inhibits EGF-induced MAPK8/JNK1 activation. Dephosphorylation by PTPRJ prevents endocytosis and stabilizes the receptor at the plasma membrane. Autophosphorylation at Tyr-1197 is stimulated by methylation at Arg-1199 and enhances interaction with PTPN6. Autophosphorylation at Tyr-1092 and/or Tyr-1110 recruits STAT3. Dephosphorylated by PTPN1 and PTPN2. Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occurs. Deubiquitination by OTUD7B prevents degradation. Ubiquitinated by RNF115 and RNF126. Methylated. Methylation at Arg-1199 by PRMT5 stimulates phosphorylation at Tyr-1197.
Cellular localization	Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. Endosome. Endosome membrane. Nucleus. In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon activation by ligand. Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF).

Images



All lanes : Anti-EGFR antibody (ab225693) at 1/500 dilution

Lane 1 : Zebrafish tissue at 80 µg

Lane 2 : Zebrafish tissue at 40 µg

Lane 3 : Zebrafish tissue at 20 µg

Lane 4 : Zebrafish tissue at 10 µg

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/50000 dilution

Developed using the ECL technique.

Predicted band size: 43 kDa

Observed band size: 43 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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