abcam

Product datasheet

Anti-EGFR (phospho Y1068) antibody [Y38] - BSA and Azide free ab171022



重组 RabMAb

3 图像

概述

产品名称 Anti-EGFR (phospho Y1068)抗体[Y38] - BSA and Azide free

描述 兔单克隆抗体[Y38] to EGFR (phospho Y1068) - BSA and Azide free

宿主 Rabbit

特异性 This antibody recognises only EGFR phosphorylated on Tyrosine 1068 of the mature human

isoform 1 (corresponding to Y1092 from the precursor form P00533-1/p170).

经测试应用 适用于: ICC/IF, WB, IP

不适用于: Flow Cyt

种属反应性 与反应: Human

预测可用于: Pig 📤

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ab171022 is the carrier-free version of ab32430. 常规说明

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 Constituent: PBS

无载体 是

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 Y38

 同种型
 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab171022于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 135 kDa. Can be blocked with ab205609.
IP		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt.

靶标

功能

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.

组织特异性 Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

疾病相关 Lung cancer

Inflammatory skin and bowel disease, neonatal, 2

序列相似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Contains 1 protein kinase domain.

翻译后修饰 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.

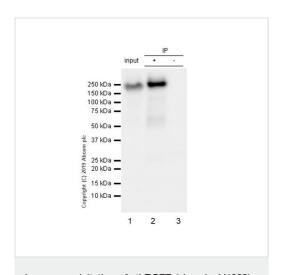
Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occurs. Deubiquitination by OTUD7B prevents degradation. Ubiquitinated by RNF115 and RNF126. Methylated. Methylation at Arg-1199 by PRMT5 stimulates phosphorylation at Tyr-1197.

细胞定位 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).

图片



Immunoprecipitation - Anti-EGFR (phospho Y1068) antibody [Y38] - BSA and Azide free (ab171022)

<u>ab32430</u> (purified) at 1/30 dilution (2ug) immunoprecipitating EGFR in A431 treated with 200 ng/ml EGF for 15 minutes whole cell lysate 10ug . A431 (Human epidermoid carcinoma epithelial cell) treated with 200 ng/ml EGF for 15 minutes whole cell lysate 10ug

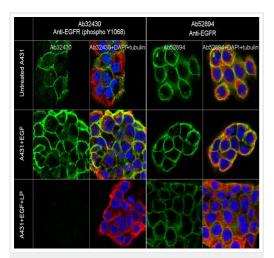
Lane 2 (+): <u>ab32430</u> & A431 treated with 200 ng/ml EGF for 15 minutes whole cell lysate 10ug

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab32430</u> in A431 treated with 200 ng/ml EGF for 15 minutes whole cell lysate 10ug

For western blotting, VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32430</u>).



Immunocytochemistry/ Immunofluorescence - Anti-EGFR (phospho Y1068) antibody [Y38] - BSA and Azide free (ab171022)

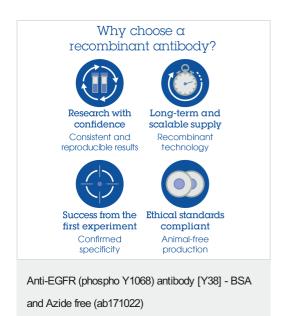
Immunocytochemistry/Immunofluorescence analysis of untreated, EGF treated and EGF + LP treated A431 cells labelling EGFR (phospho Y1068) with purified <u>ab32430</u> (left) and EGFR with <u>ab52894</u> (right) both at a dilution of 1/1000.

Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor 594-conjugated goat anti-mouse IgG (1/1000) were also used.

The image shows increased membrane staining after EGF (100ng/ml, 30min) treatment on A431 cells. The LP treatment decreased the increased membrane staining caused by EGF.

<u>ab52894</u> was used as a Pan control for <u>ab32430</u>. The results showed membrane and cytoplasmic staining on untreated, EGF and EGF + LP treated A431 cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32430).



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