abcam

Product datasheet

Anti-EGFR (phospho Y1086) antibody [Y39] ab32086

יעלאעבע RabMAb

10 References 画像数7

製品の概要

製品名 Anti-EGFR (phospho Y1086) antibody [Y39]

製品の詳細 Rabbit monoclonal [Y39] to EGFR (phospho Y1086)

由来種 Rabbit

特異性 This antibody only detects EGFR phosphorylated on Tyrosine 1086 of the mature human isoform

アプリケーション 適用あり: WB, IP, Dot blot, ICC/IF

適用なし: Flow Cyt or IHC

種交差性 交差種: Human

免疫原 Synthetic peptide within Human EGFR. The exact sequence is proprietary.

(Peptide available as ab179559)

ポジティブ・コントロール A431 cells. IP: A431 cell lysate

特記事項 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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 Y39 アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab32086の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/10000. Detects a band of approximately 170 kDa (predicted molecular weight: 134 kDa).
IP		1/150.
Dot blot		Use at an assay dependent concentration.
ICC/IF		1/100 - 1/250.

追加情報

Is unsuitable for Flow Cyt or IHC.

ターゲット情報

機能

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.

組織特異性 Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

関連疾患 Lung cancer

Inflammatory skin and bowel disease, neonatal, 2

配列類似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Contains 1 protein kinase domain.

翻訳後修飾 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

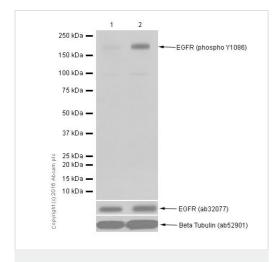
STAT3. Dephosphorylated by PTPN1 and PTPN2.

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.

細胞内局在

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).

画像



Western blot - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)

All lanes : Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086) at 1/3000 dilution

Lane 1 : Untreated A431 (Human epidermoid carcinoma cell line) whole cell lysates

Lane 2: A431 (Human epidermoid carcinoma cell line) treated with 100 ng/ml EGF for 10 minutes whole cell lysates

Lysates/proteins at 15 µg per lane.

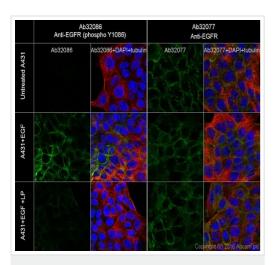
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

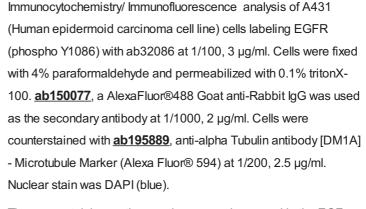
Predicted band size: 134 kDa **Observed band size:** 170 kDa

Exposure time: 10 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)



The green staining on the membrane was increased in the EGF (100ng/ml, 10min) treated A431 cells when compared with A431 cells without treatment. After LP treatment, the green signaling was obviously decreased.

For the pan antibody, there was no great difference after EGF (100ng/ml, 10min) or EGF (100ng/ml, 10min) + LP treatment. The data showed mostly membranous staining.



Immunoprecipitation - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)

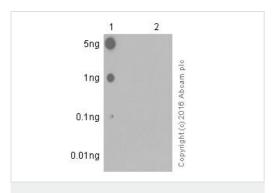
Purified ab32086 at 1/20 dilution (1 μ g) immunoprecipitating EGFR in A431 treated with 100ng/mL EGF for 30min whole cell lysate. Lane 1 (input): A431 (Human epidermoid carcinoma epithelial cell) treated with 100ng/mL EGF for 30min whole cell lysate 10 μ g Lane 2 (+): ab32086 + A431 treated with 100ng/mL EGF for 30min whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab32086 in A431 treated with 100ng/mL EGF for 30min whole cell lysate. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 175 kDa

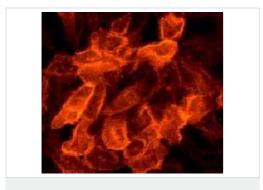


Dot Blot - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)

Dot blot analysis of EGFR (phospho Y1086) phospho peptide (Lane 1), EGFR non-phospho peptide (Lane 2), labeling EGFR (phospho Y1086) with <u>ab32068</u> at a dilution of 1/1000. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) was used as the secondary antibody at a dilution of 1/100000.

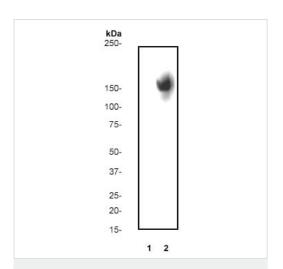
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 5 seconds.



Immunocytochemistry/ Immunofluorescence - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)

Immunofluorescent analysis of EGFR (phospho Y1086) expression in A431 cell culture, using 1/100 ab32086.



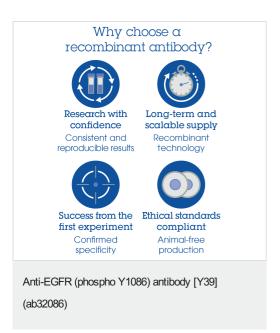
Western blot - Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086)

All lanes : Anti-EGFR (phospho Y1086) antibody [Y39] (ab32086) at 1/10000 dilution

Lane 1: Untreated A431 cell lysate

Lane 2: A431 cell lysate, treated with EGF

Predicted band size: 134 kDa **Observed band size:** 150 kDa



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