abcam

Product datasheet

Anti-EGFR (phospho T669) antibody [EP2256Y] ab75980

リコンビナント RabMAb

3 References 画像数 3

製品の概要

製品名	Anti-EGFR (phospho T669) antibody [EP2256Y]
製品の詳細	Rabbit monoclonal [EP2256Y] to EGFR (phospho T669)
由来種	Rabbit
特異性	Recognises EGFR phosphorylated on Threonine 669 of the mature human isoform 1 (corresponding to T693 from the precursor form P00533-1/p170)
アプリケーション	**適用あり:** ICC/IF, Dot blot, WB **適用なし:** Flow Cyt or IHC-P
種交差性	**交差種:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: A431 treated with 100ng/ml Epidermal Growth Factor (EGF). ICC/IF: A431 cells. Dot Blot: EGFR (phospho T669) peptide.
特記事項	This product has switched from a hybridoma to recombinant production method on 9th February 2024. 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.

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: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP2256Y
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ab75980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
ICC/IF		1/500.
Dot blot		1/1000.
WB		1/2000. Detects a band of approximately 175 kDa (predicted molecular weight: 134 kDa).

追加情報 Is unsuitable for Flow Cyt or IHC-P.

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.

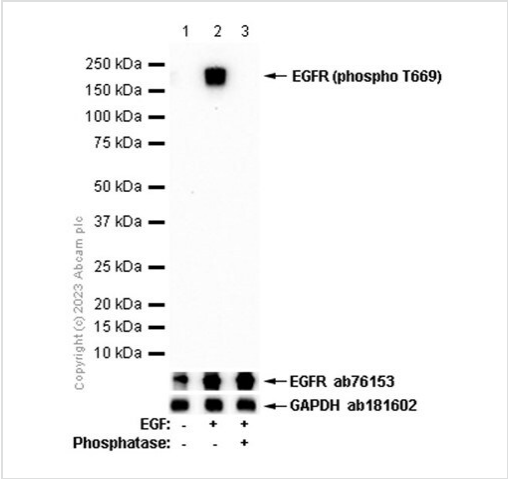
翻訳後修飾 Phosphorylation at Ser-695 is partial and occurs only if Thr-693 is phosphorylated. Phosphorylation at Thr-678 and Thr-693 by PRKD1 inhibits EGF-induced MAPK8/JNK1 activation. Dephosphorylation by PTPRJ prevents endocytosis and stabilizes the receptor at the plasma membrane. Autophosphorylation 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 T669) antibody [EP2256Y] (ab75980)

All lanes : Anti-EGFR (phospho T669) antibody [EP2256Y] (ab75980) at 1/2000 dilution

Lane 1 : Untreated A431 (Human epidermoid carcinoma) whole cell lysate
Lane 2 : A431 treated with 100ng/ml Epidermal Growth Factor (EGF) for 30mins whole cell lysate
Lane 3 : A431 treated with 100ng/ml Epidermal Growth Factor (EGF) for 30mins whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

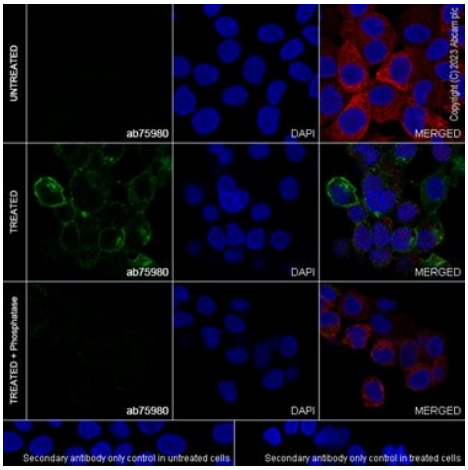
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Performed under reducing conditions.

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

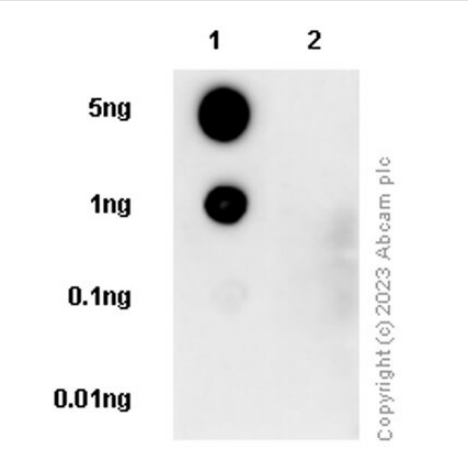
Exposure time: 40 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-EGFR (phospho T669) antibody [EP2256Y] (ab75980)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A431 cells labelling EGFR with ab75980 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) at 1/1000 dilution. Alexa Fluor® 594 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (**ab195889**) was used to counterstain tubulin at 1/200 dilution. The nuclear counterstain was DAPI (Blue).



Dot Blot - Anti-EGFR (phospho T669) antibody [EP2256Y] (ab75980)

Dot blot analysis of EGFR (phospho T669) using ab75980 at 1/1000 dilution, followed by a Goat Anti-Rabbit IgG (H+L) Peroxidase conjugated (**ab97051**) at 1/2500 dilution. Blocking and dilution buffer: 5% NFDM/TBST. Exposure time: 41s.

Lane 1: EGFR (phospho T669) peptide

Lane 2: EGFR non-phospho peptide

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.co.jp/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors