# abcam

### Product datasheet

## Anti-EGFR (phospho Y1173) antibody [E124] ab32578

ועלשעבע RabMAb

#### 33 References 画像数4

#### 製品の概要

製品名 Anti-EGFR (phospho Y1173) antibody [E124]

製品の詳細 Rabbit monoclonal [E124] to EGFR (phospho Y1173)

由来種 Rabbit

特異性 The antibody detects EGFR phosphorylated on Tyrosine 1173 of the mature human isoform 1

(corresponding to Y1197 from the precursor).

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra), WB

適用なし: 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 Flow Cyt (Intra): Trichostatin A treated HeLa cells.

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**.

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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

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** E124

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab32578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		1/25 - 1/50.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 170 kDa (predicted molecular weight: 170 kDa).

追加情報 Is unsuitable for 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/betacatenin.

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.

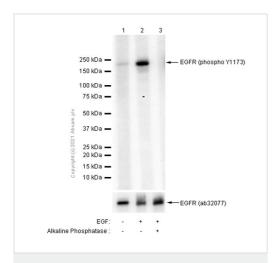
Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine

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.

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).

#### 細胞内局在

#### 画像



Western blot - Anti-EGFR (phospho Y1173) antibody [E124] (ab32578)

**All lanes :** Anti-EGFR (phospho Y1173) antibody [E124] (ab32578) at 1/1000 dilution (Purified)

**Lane 1 :** Untreated A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate

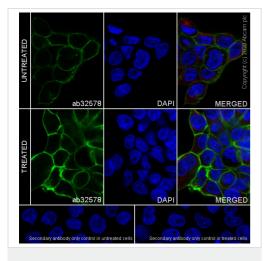
**Lane 2**: A431 (Human epidermoid carcinoma epithelial cell) treated with 100ng/ml EGF for 30 minutes whole cell lysate

**Lane 3**: A431 (Human epidermoid carcinoma epithelial cell) treated with 100ng/ml EGF for 30 minutes whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

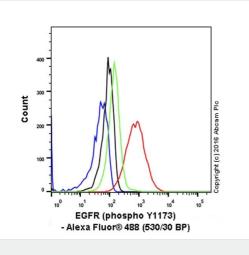
#### Secondary

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

Predicted band size: 170 kDa



Immunocytochemistry/ Immunofluorescence - Anti-EGFR (phospho Y1173) antibody [E124] (ab32578) Immunocytochemistry analysis of A431 (Human epidermoid carcinoma epithelial cell) treated with EGF(100ng/ml 5min) cells labeling EGFR with Purified ab32578 at 1:2000 dilution (0.1 μg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Antialpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 μg/ml). Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 μg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-EGFR (phospho Y1173) antibody [E124] (ab32578) Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) treated (Red)/untreated (Green) with 500ng/ml Trichostatin A for 4 hours with purified <a href="mailto:ab177178">ab177178</a> at 1/1300 dilution. The secondary antibody was Goat anti rabbit lgG (Alexa Fluorr® 488) at 1/2000 dilution. A Rabbit monoclonal lgG (Black) was used as the isotype control and cells without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



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