# abcam

## Product datasheet

# Anti-EGFR antibody ab131498

14 References 画像数 3

#### 製品の概要

製品名 Anti-EGFR antibody

製品の詳細 Rabbit polyclonal to EGFR

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

免疫原 Synthetic peptide from around amino acids 1068-1072 (

**RYSSD** 

) of Human EGFR (NP\_005219.2)

Run BLAST with
Run BLAST with

ポジティブ・コントロール

特記事項

MCF cells, HUVEC and MDA cell extracts, Human breast carcinoma tissue.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 48% PBS, 50% Glycerol, 0.88% Sodium chloride

PBS without Mg<sup>2+</sup> and Ca<sup>2+</sup>

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

1

アイソタイプ

ΙgG

#### 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ab131498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       |           | 1/500 - 1/1000. Predicted molecular weight: 134 kDa. |
| IHC-P    |           | 1/50 - 1/100.  |
| ICC/IF   |           | 1/100 - 1/200.                                       |

#### 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.

組織特異性

Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

Isoform 2 may act as an antagonist of EGF action.

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.

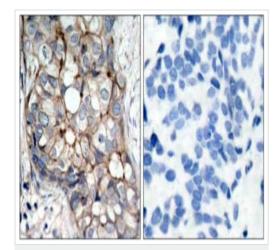
Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occurs. Deubiquitination 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,

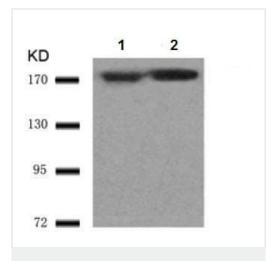
translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon activation by ligand. Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF).

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EGFR antibody (ab131498)

Immunohistochemical analysis of paraffin embedded Human breast carcinoma tissue labelled with ab131498 at 1/50 diluton (left) and ab131498 preincubated with blocking peptide (right).



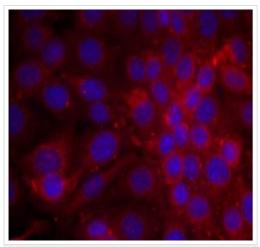
Western blot - Anti-EGFR antibody (ab131498)

All lanes: Anti-EGFR antibody (ab131498) at 1/500 dilution

Lane 1 : HUVEC extract

Lane 2 : MDA cell extract

Predicted band size: 134 kDa



Immunocytochemistry/ Immunofluorescence - Anti-EGFR antibody (ab131498)

Immunifluorescence analysis of methanol fixed MCF cells using ab131498 at 1/100 dilution.

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

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