# abcam

### Product datasheet

## HRP Anti-EGFR antibody [EP38Y] ab193602

יעלאעבע RabMAb

1 References 画像数3

#### 製品の概要

製品名 HRP Anti-EGFR antibody [EP38Y]

製品の詳細 HRP Rabbit monoclonal [EP38Y] to EGFR

由来種 Rabbit 標識 HRP

アプリケーション 適用あり: IHC-P, WB 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. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa whole cell lysate (ab150035). IHC: Normal human placenta tissue

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit 特記事項

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

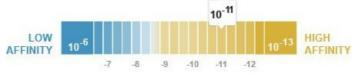
#### 製品の特性

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. Store In the Dark.

 $K_D = 1.90 \times 10^{-11} M$ 解離定数(KD値)



Learn more about K<sub>D</sub>

バッファー pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Affinity purified 精製度 モノクローナル ポリモノ

クローン名 EP38Y アイソタイプ

ΙgG

#### アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab193602の使用に適用されます The Abpromise guarantee 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
IHC-P		1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 175 kDa (predicted molecular weight: 134 kDa).

#### 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.

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.

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.

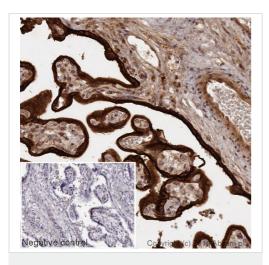
組織特異性

翻訳後修飾

#### 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) - HRP Anti-EGFR antibody
[EP38Y] (ab193602)

IHC image of EGFR staining in a section of formalin-fixed paraffinembedded normal human placenta tissue\*. The section was pretreated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30 mins. The section was incubated with ab193602 at a working dilution of 1 in 500 overnight at +4°C. The section was counterstained with haematoxylin and mounted with DPX.

The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Western blot - HRP Anti-EGFR antibody [EP38Y] (ab193602)

HRP Anti-EGFR antibody [EP38Y] (ab193602) at 1/5000 dilution + HeLa whole cell lysate (ab150035) at 10  $\mu g$ 

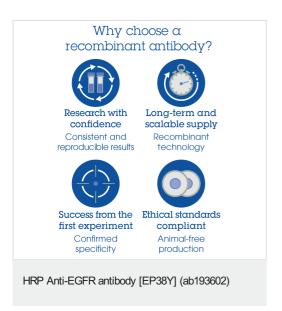
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 134 kDa **Observed band size:** 175 kDa

Exposure time: 3 minutes

This blot was produced using a 3-8% Tris Acetate gel under the TA buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab193602 overnight at 4°C. Antibody binding



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

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