# abcam

# Product datasheet

# PE/Cy7® Anti-EGFR antibody [EGFR1] ab239309

## 画像数1

#### 製品の概要

製品名 PE/Cy7® Anti-EGFR antibody [EGFR1]

製品の詳細 PE/Cy7® Mouse monoclonal [EGFR1] to EGFR

由来種 Mouse

標識 PE/Cy7®. Ex: 496nm, Em: 774nm

特異性 ab239309 reacts with extracellular domain of human protein kinase EGFR (ErbB1 / HER1).

アプリケーション 適用あり: Flow Cyt

種交差性 交差種: Human

免疫原 Tissue, cells or virus corresponding to Human EGFR. A431 (Human epidermoid carcinoma cell

line) cells.

エピトープ Epitope within amino acids 6-273.

ポジティブ・コントロール Flow cyt: A431 cells.

特記事項
This product or portions thereof is manufactured under license from Carnegie Mellon University

under U.S. Patent Number 5, 268, 486 and related patents. Cy<sup>®</sup> and CyDye<sup>®</sup> are trademarks of

Cytiva.

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 +4°C. Store In the Dark.

**バッファー** pH: 7.4

Preservative: 0.0975% Sodium azide

Constituent: PBS

精製度 Size exclusion

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特記事項(精製) The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum conditions. The

conjugate is purified by size-exclusion chromatography and adjusted for direct use. No

reconstitution is necessary.

**ポリ/モノ** モノクローナル

**クローン名** EGFR1 Pイソタイプ lgG2b

#### 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ab239309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
Flow Cyt		Use $4\mu I$ for $10^6$ cells. OR 100 $\mu I$ of whole blood.

#### 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.

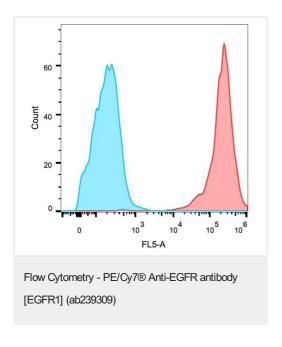
Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occurs. Deubiquitination by OTUD7B prevents degradation. Ubiquitinated by RNF115 and RNF126. Methylated. Methylation at Arg-1199 by PRMT5 stimulates phosphorylation at Tyr-1197.

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#### 細胞内局在

Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. 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



Flow Cytometry analysis of A431 (Human epidermoid carcinoma cell line) cells labeling EGFR with ab239309 (red). Surface staining.

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