# abcam

### Product datasheet

## Anti-EGFR Affibody® Molecule FITC ab81872

3 References 画像数 3

製品の概要

製品名 Anti-EGFR Affibody® Molecule FITC

標識 FITC. Ex: 493nm, Em: 528nm

特記事項(標識) The molecule is conjugated at the unique C-terminal cysteine using a maleimide activated

fluorescein reagent. Stability: There is no decrease in performance of the fluorescein conjugated Affibody® molecule after 10 repeated freeze and thaw cycles or after storage for 1 week in room

temperature.

特異性 This product binds to human EGFR. This anti-EGFR Affibody® molecule is a specific affinity

ligand selected against the extracellular domain of EGFR. The FITC conjugated Anti-EGFR Affibody® molecule is excellent as a one step reagent for fluorescence studies of EGFR

expression on cells as well as for flow cytometry.

アプリケーション 適用あり: Flow Cyt, ICC/IF

**適用なし**: IHC-P

種交差性 交差種: Human

免疫原 Recombinant full length protein corresponding to EGFR.

ポジティブ・コントロール A431 cells.

特記事項 This product is a recombinant protein produced in E.coli.

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 repeated freeze / thaw cycles.

**バッファー** pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 0.87% Sodium chloride, 0.328% Sodium phosphate

特記事項(精製) Purity: >98% as determined by RP-HPLC analysis. Extinction coefficient: 1 Abs280 = 1.30 mg/ml.

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.

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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).

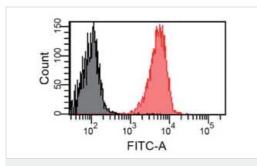
アプリケーション

**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ab81872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 a concentration of 0.1 - 5 µg/ml.
ICC/IF		Use a concentration of 1 - 5 μg/ml.

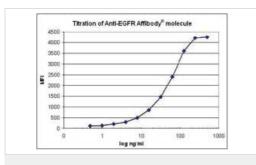
追加情報 Is unsuitable for IHC-P.

画像



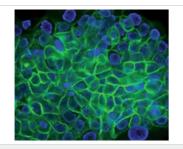
Flow Cytometry - Anti-EGFR Affibody® Molecule FITC (ab81872)

Fluorescence histogram from flow cytometry analysis on EGFR expressing A431 cells. Staining with ab81872 caused an increase in fluorescence intensity as shown by a shift to the right (red line) compared to control (black line).



Flow Cytometry - Anti-EGFR Affibody® Molecule FITC (ab81872)

Titration diagram from cytometry analysis of EGFR expressing A431 cells. ab81872 was titrated on EGFR expressing A431 cells. The concentration was plotted against the mean fluorescence intensity (MFI).



Immunocytochemistry/ Immunofluorescence - Anti-EGFR Affibody® Molecule FITC (ab81872)

A431 cells were stained with ab81872 at 2µg/ml by Immunofluorescence. The staining was localized to the membrane of the EGFR-expressing A431 cells. The nuclei were counter stained with DAPI.

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