abcam

Product datasheet

Recombinant human EGFR (mutated G719S) protein ab190393

5 图像

描述

产品名称 重组人EGFR (mutated G719S)蛋白

生物活性 The specific activity of ab190393 was determined to be 32 nmol/min/mg.

纯**度** > 85 % Densitometry.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession P00533

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

序列 SGEAPN QALLRILKET EFKKIKVLSS GAFGTVYKGL

WIPEGEKVKI PVAIKELREA TSPKANKEIL DEAYVMASVD NPHVCRLLGI CLTSTVQLIT QLMPFGCLLD YVREHKDNIG SQYLLNWCVQ IAKGMNYLED RRLVHRDLAA RNVLVKTPQH VKITDFGLAK LLGAEEKEYH AEGGKVPIKW MALESILHRI YTHQSDVWSY GVTVWELMTF GSKPYDGIPA SEISSILEKG ERLPQPPICT IDVYMIMVKC WMIDADSRPK FRELIIEFSK MARDPQRYLV IQGDERMHLP SPTDSNFYRA LMDEEDMDDV VDADEYLIPQ QGFFSSPSTS RTPLLSSLSA TSNNSTVACI DRNGLQSCPI KEDSFLQRYS SDPTGALTED SIDDTFLPVP EYINQSVPKR PAGSVQNPVY HNQPLNPAPS RDPHYQDPHS TAVGNPEYLN TVQPTCVNST FDSPAHWAQK GSHQISLDNP DYQQDFFPKE AKPNGIFKGS TAENAEYLRV APQSSEFIGA

预**测分子量** 89 kDa including tags

氨基酸 695 to 1210 **修饰** mutated G719S

标签 proprietary tag N-Terminus

额外的序列信息 NM_005228.

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技术指标

Our Abpromise guarantee covers the use of ab190393 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 **Functional Studies**

SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.50

Constituents: 0.79% Tris HCI, 0.87% Sodium chloride, 25% Glycerol (glycerin, glycerine), 0.31%

Glutathione, 0.003% EDTA, 0.004% DTT, 0.002% PMSF

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

功能

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.

组织特异性 Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

疾病相关 Lung cancer

Inflammatory skin and bowel disease, neonatal, 2

序列相似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Contains 1 protein kinase domain.

翻译后修饰 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

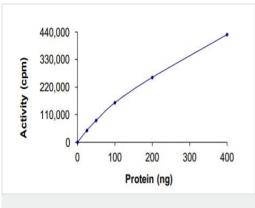
STAT3. Dephosphorylated by PTPN1 and PTPN2.

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.

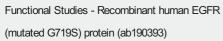
细胞定位

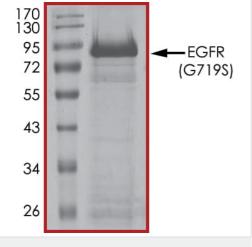
Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. Endosome. Endosome membrane. Nucleus. In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon activation by ligand. Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF).

图片



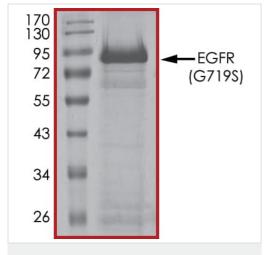
The specific activity of EGFR (ab190393) was determined to be 37 nmol/min/mg as per activity assay protocol





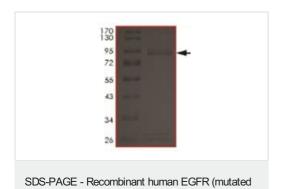
SDS-PAGE - Recombinant human EGFR (mutated G719S) protein (ab190393)

SDS PAGE analysis of ab190393



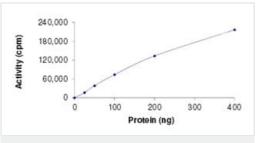
SDS PAGE analysis of ab190393

SDS-PAGE - Recombinant human EGFR (mutated G719S) protein (ab190393)



G719S) protein (ab190393)

SDS Page analysis of ab190393.



Functional Studies - Recombinant human EGFR (mutated G719S) protein (ab190393)

Kinase Assay demonstrating the specific activity of ab190393.

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