

Recombinant human EGFR protein (Active) ab155639

3 References 3 图像

描述	
产品名称	重组人EGFR蛋白(Active)
生物活性	Measured by its binding ability in a functional ELISA. Immobilized Cetuximab at 2 µg/mL (100 µL/well) can bind ab155639 with a linear range of 0.006-0.025 µg/mL.
纯度	> 95 % SDS-PAGE.
内毒素水平	< 1.000 Eu/µg
表达系统	HEK 293 cells
Accession	P00533
蛋白长度	Protein fragment
无动物成分	No
性质	Recombinant
种属	Human
序列	LEEKKVCQGTSNKLTQLGTFEDHFLSLQRMFNNCEVVLGNLE ITYVQRNY DLSFLKTIQEVAGYVLIALNTVERIPLLENLQIIRGNMYYENS YALAVLSN YDANKTGLKELPMRNLQEILHGAVRFSNNPALCNVESIQWRD IVSSDFLS NMSMDFQNLHGSCQKCDPSCPNGSCWGAGEENCQKLTKIICA QQCSGRCR GKSPSDCCHNQCAAGCTGPRESCLVCRKFRDEATCKDTCPP LMLYNPTT YQMDVNPEGKYSFGATCVKKCPRNYVVTDHGSCVRACGADSY EMEEDGVR KCKKCEGPCRKVCNGIGIGEFKDSLINATNIKHFKNCTSI GDLHILPV AFRGDSFTHTPPLDPQELDILKTVKEITGFLLIQAWPENRTD LHAFENLE IIRGRTKQHGGFSLAVVSLNITSLGLRSLKEISGDGVIISGN KNLCYANT INWKKLFGTSGQKTKIISNRGENSCKATGQVCHALCSPEGCW GPEPRDCV

SCRNVSRGRECVDKCNLLEGEPRFVENSECIQCHPECLPQA
MNITCTGR
GPDNCIQCAHYIDGPHCVKTCAPAGVMGENNTLVWKYADAGHV
CHLCHPNC TYGCTGPGLEGCPNGPKIPS-
Linker(gggsgggs)-10*His(hhhh hhhhhh)

预测分子量	71 kDa including tags
氨基酸	25 to 645
标签	His tag C-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab155639** 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
	ELISA
形式	Lyophilized

制备和贮存

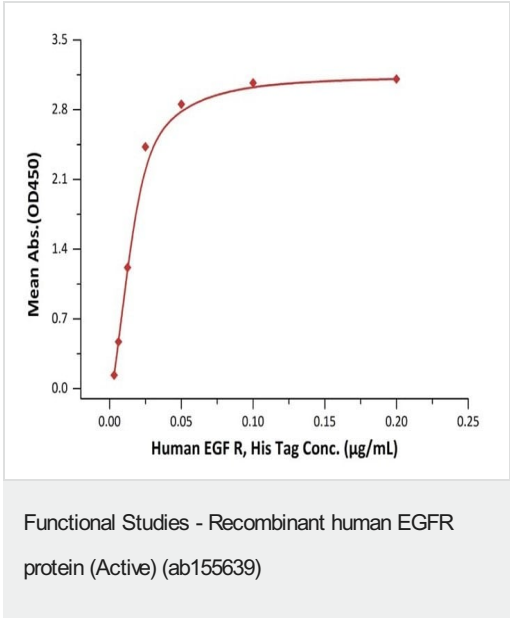
稳定性和存储	Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituents: PBS, 5% Trehalose Lyophilized from 0.22 µm filtered solution. This product is an active protein and may elicit a biological response in vivo, handle with caution.
复溶	1 mg It is recommended to reconstitute the lyophilized protein in sterile deionized water to a final concentration of 200 ug/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.

常规信息

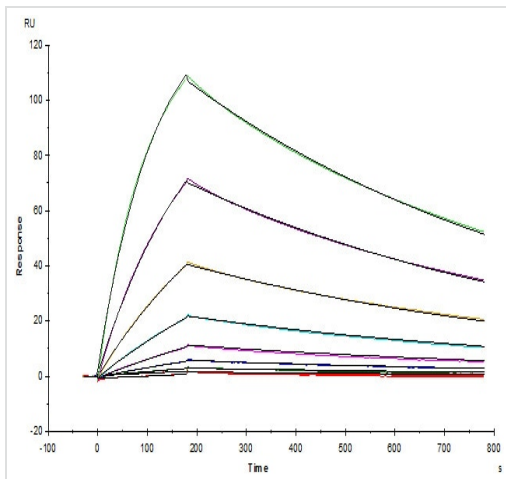
功能	Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding 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/beta-catenin. Isoform 2 may act as an antagonist of EGF action.
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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

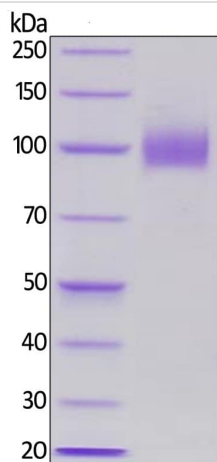


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Erbbitux (Cetuximab), captured on CM5 chip via anti-human IgG Fc antibodies surface, binds ab155639 with an affinity constant of 1.3 nM, as determined in an SPR assay (Biacore T200) (Routinely tested).

Functional Studies - Recombinant human EGFR protein (ab155639)



Reduced ab155639 on SDS-PAGE, stained overnight with Coomassie Blue.

The purity of the protein is greater than 95%.

The protein migrates as 95-120 kDa under reducing condition due to glycosylation.

SDS-PAGE - Recombinant human EGFR protein (ab155639)

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