

# Anti-EGFR (phospho Y1148) antibody ab5651

[1 References](#) [2 图像](#)

### 概述

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<b>产品名称</b>	Anti-EGFR (phospho Y1148)抗体
<b>描述</b>	兔多克隆抗体to EGFR (phospho Y1148)
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> WB, ICC
<b>种属反应性</b>	<b>与反应:</b> Human
<b>免疫原</b>	Synthetic peptide corresponding to Human EGFR (phospho Y1148).
<b>阳性对照</b>	A431 cells stimulated with EGF, A549 cells.
<b>常规说明</b>	<p>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.</p> <p>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&amp;As</p>

### 性能

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<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>存储溶液</b>	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
<b>纯度</b>	Immunogen affinity purified
<b>纯化说明</b>	The antibody has been negatively preadsorbed using (i) a non phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated epidermal growth factor receptor (EGFR), and (ii) a generic tyrosine phosphorylated peptide to remove antibody that is reactive with phosphotyrosine, irrespective of the sequence. The final product is generated by affinity chromatography using an EGFR-derived peptide that is phosphorylated at tyrosine 1148.
<b>克隆</b>	多克隆

同种型

IgG

## 应用

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“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 140 kDa.
ICC		1/250.

## 靶标

### 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.

### 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

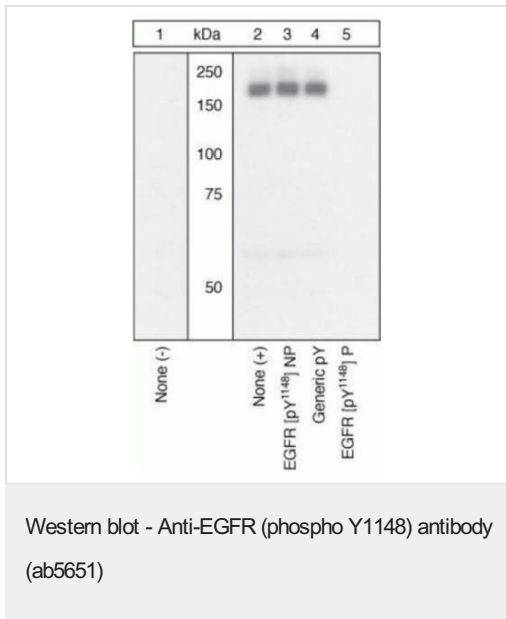
Phosphorylation at Ser-695 is partial and occurs only if Thr-693 is phosphorylated. Phosphorylation at Thr-678 and Thr-693 by PRKD1 inhibits EGF-induced MAPK8/JNK1 activation. Dephosphorylation by PTPRJ prevents endocytosis and stabilizes the receptor at the plasma membrane. Autophosphorylation at Tyr-1197 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-

图片



**All lanes :** Anti-EGFR (phospho Y1148) antibody (ab5651) at 1/1000 dilution

**Lane 1 :** A431 cells unstimulated with no peptide

**Lane 2 :** A431 cells stimulated with 200 ng/mL EGF for 15 minutes with no peptide

**Lane 3 :** A431 cells stimulated with 200 ng/mL EGF for 15 minutes with non-phosphopeptide corresponding to the phosphopeptide immunogen

**Lane 4 :** A431 cells stimulated with 200 ng/mL EGF for 15 minutes with a generic phosphotyrosine-containing peptide

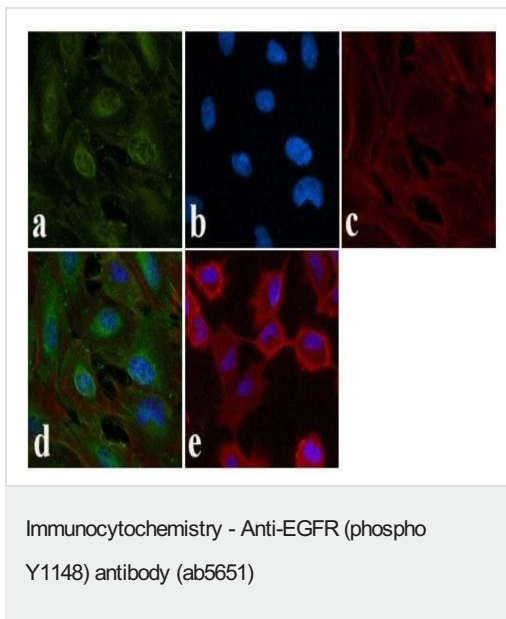
**Lane 5 :** A431 cells stimulated with 200 ng/mL EGF for 15 minutes with phosphopeptide immunogen

**Secondary**

**All lanes :** goat F(ab')<sub>2</sub> anti-rabbit IgG HRP conjugate

Blocking buffer: 5% BSA-TBST

The phosphopeptide corresponding to EGFR [pY1148] blocks the signal.



Immunocytochemical analysis of EGFR (pY1148) on A549 cells. The cells were fixed with 4% paraformaldehyde, permeabilized with 0.25% Triton™ X-100. The cells were labeled with ab5651 at 1/250 dilution in 1% BSA and incubated for 3 hours at room temperature followed by Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody at a dilution of 1/400 (Panel a: green). Nuclei (Panel b: blue) were stained DAPI. (Panel c: red) F-actin was stained with Alexa Fluor 594 Phalloidin. Panel d is a merged image showing cytoplasmic localization. Panel e shows no primary antibody control.

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