

For Research Use Only

# EGFR Monoclonal antibody

Catalog Number: 68643-1-Ig



## Basic Information

<b>Catalog Number:</b> 68643-1-Ig	<b>GenBank Accession Number:</b> NM_005228.5	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1956	<b>CloneNo.:</b> 2C8C12
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P00533	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IF/ICC 1:500-1:2000
<b>Isotype:</b> IgG1	<b>Full Name:</b> epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian)	
<b>Immunogen Catalog Number:</b> AG24947	<b>Calculated MW:</b> 134kd	
	<b>Observed MW:</b> 160 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, FC, ELISA, Blocking	<b>Positive Controls:</b> WB : SCaBER cells, HaCaT cells, MDA-MB-468 cells, A431 cells
<b>Species Specificity:</b> human	<b>IF/ICC :</b> HaCaT cells, A431 cells

## Background Information

EGFR, also named ERBB1, is a cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. The gene resides on chromosome 7p12, encoding a 170 kDa membrane-associated glycoprotein. Recent studies have shown EGFR plays a critical role in cancer development and progression, including cell proliferation, apoptosis, angiogenesis, and metastatic spread. Mutations in this gene are associated with lung cancer. When stained with live cells, EGFR can be transported into the cell interior, which is consistent with the literature report (PMID: 18084617).

## Storage

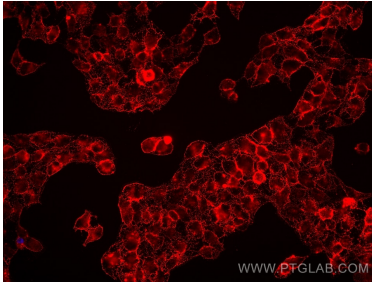
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

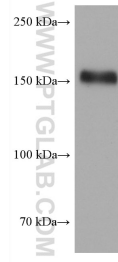
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

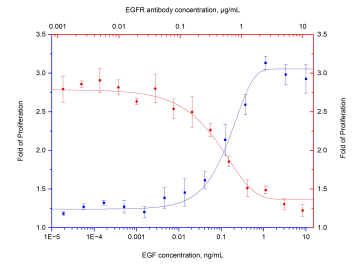
## Selected Validation Data



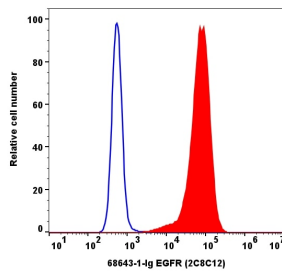
Immunofluorescent analysis of un-fixed HaCaT cells using EGFR antibody (68643-1-Ig, Clone: 2C8C12) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



SCaBER cells were subjected to SDS PAGE followed by western blot with 68643-1-Ig (EGFR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Human EGF (Cat.NO. HZ-1326) stimulates proliferation of HeLa cells in a dose-dependent manner (blue curve, refer to bottom X-left Y axis). The activity of human EGF (Cat.NO. HZ-1326) is blocked by mouse anti-human EGFR monoclonal antibody 68643-1-Ig at serial dose (red curve, refer to top X-right Y axis). The EC<sub>50</sub> is typically 0.2-0.8 µg/mL at the presence of 1ng/ml EGF (Cat.NO. HZ-1326).



1x10<sup>6</sup> A431 cells were surface stained with 0.2 µg EGFR Monoclonal Antibody (68643-1-Ig, Clone:2C8C12) and CoraLite488-conjugated Goat Anti-Mouse IgG(H+L) (Cat.NO. SA00013-1)(red), or 0.2 µg Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (blue). Cells were not fixed.