For Research Use Only

EGFR Monoclonal antibody, PBS Only (Capture)

Catalog Number:68643-1-PBS

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
68643-1-PBS

Size:
100ug , Concentration: 1mg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG24947

GenBank Accession Number:
NM_005228.5

GeneID (NCBI):
1956

UNIPROT ID:
P00533

Full Name:
epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian)

Calculated MW:
134kd

Observed MW:
160 kDa

Purification Method:
Protein G purification

CloneNo.:
2C8C12

Applications

Tested Applications:
WB, IF/ICC, FC, Sandwich ELISA, Indirect ELISA, Blocking, Sample test

Species Specificity:
human

Product Information

68643-1-PBS targets EGFR as part of a matched antibody pair:

MP50069-1: 68643-1-PBS capture and 68643-2-PBS detection (validated in Sandwich ELISA)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

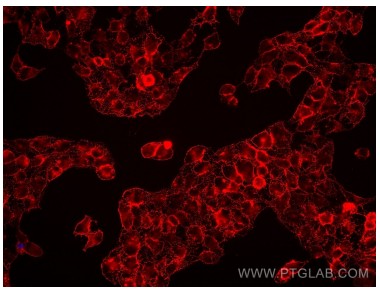
EGFR, also named ERBB1, is a cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. The gene resides on chromosome 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

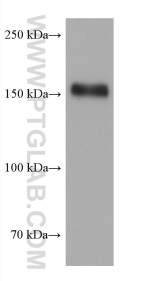
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

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

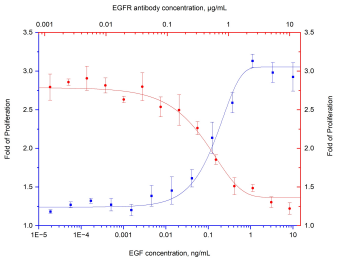
Selected Validation Data



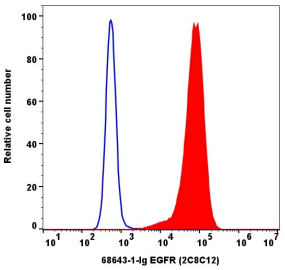
Immunofluorescent analysis of un-fixed HaCaT cells using EGFR antibody (68643-1-Ig, Clone: 2C8C12) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 68643-1-PBS in a different storage buffer formulation.



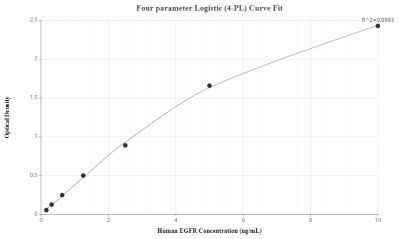
SCaBER cells were subjected to SDS PAGE followed by western blot with 68643-1-Ig (EGFR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68643-1-PBS in a different storage buffer formulation.



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 EC50 is typically 0.2-0.8 μg/mL at the presence of 1ng/ml EGF (Cat.NO. HZ-1326). This data was developed using the same antibody clone with 68643-1-



1x10^6 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. This data was developed using the same antibody clone with 68643-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP50069-1, EGFR Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68643-1-PBS. Detection antibody: 68643-2-PBS. Standard: Eg0204. Range: 0.156-10 ng/mL.