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

Concentration:
1000 ug/ml

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

Background Information

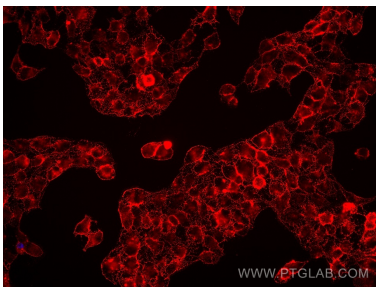
EGFR, also named ERBB1, is a cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. The gene resides on chromosome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

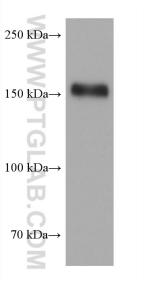
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C
Storage Buffer:
PBS only, pH7.3

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

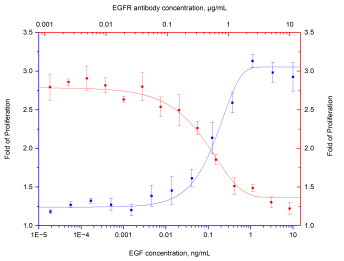
Selected Validation Data



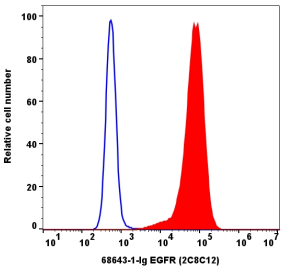
Immunofluorescent analysis of un-fixed HaCaT cells using EGFR antibody (68643-1-Ig, Clone: 2C8C12) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 68643-1-PBS in a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



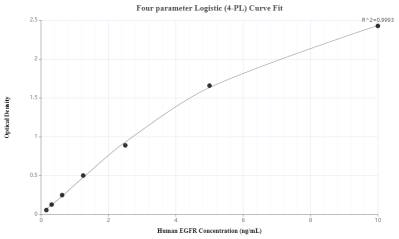
SCaBER cells were subjected to SDS PAGE followed by western blot with 68643-1-Ig (EGFR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68643-1-PBS in a different storage buffer formulation.



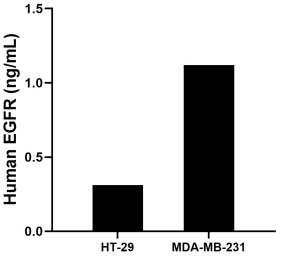
Human EGF (Cat.NO. HZ-1326) stimulates proliferation of HeLa cells in a dose-dependent manner (blue curve, refer to bottom X-left Y axis). The activity of human EGF (Cat.NO. HZ-1326) is blocked by mouse anti-human EGFR monoclonal antibody 68643-1-Ig at serial dose (red curve, refer to top X-right Y axis). 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-



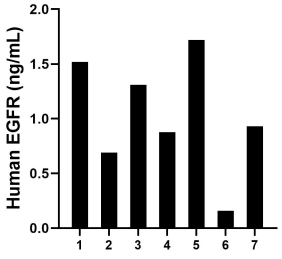
1x10^6 A431 cells were surface stained with 0.2 μg EGFR Monoclonal Antibody (68643-1-Ig, Clone:2C8C12) and CoraLite488-conjugated Goat Anti-Mouse IgG(H+L) (Cat.NO. SA00013-1)(red), or 0.2 μg Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (blue). Cells were not fixed. This data was developed using the same antibody clone with 68643-1-PBS in a different storage buffer formulation.



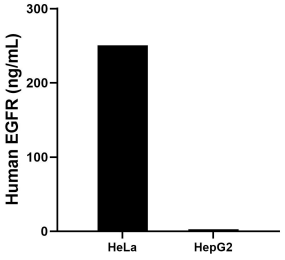
Sandwich ELISA standard curve of MP50069-1, EGFR Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68643-1-PBS. Detection antibody: 68643-2-PBS. Standard: Eg0204. Range: 0.156-10 ng/mL.



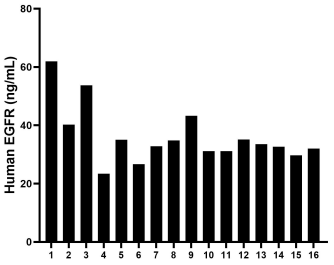
HT-29 and MDA-MB-231 were cultured in RPMI-1640 supplemented with 10% fetal bovine serum, 100 U/mL penicillin and 100 μg/mL streptomycin sulfate. An aliquot of the culture supernates were removed, assayed for human IDO1, and measured 0.31 ng/mL and 1.12 ng/mL.



Human milk of seven individual healthy human donors was measured. The human EGFR concentration of detected samples was determined to be 1.03 ng/mL with a range of 0.16 - 1.72 ng/mL.



The mean EGFR concentration was determined to be 250.71 ng/mL in HeLa cell extract based on a 4.4 mg/mL extract load and 2.64 ng/mL in HepG2 cell extract based on a 4.1 mg/mL extract load.



Serum of sixteen individual healthy human donors was measured. The human EGFR concentration of detected samples was determined to be 36.08 ng/mL with a range of 23.43 - 61.95 ng/mL.