

Product Name: KD-Validated Epidermal Growth Factor Receptor Mouse Monoclonal Antibody

Catalog #: KVA00680

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:2,500-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 134.3kDa

Antigen Information

Gene Name	EGFR EGFR; Epidermal Growth Factor Receptor; ERBB1; ERBB; Receptor Tyrosine-Protein Kinase ErbB-1; Erb-B2 Receptor Tyrosine Kinase 1; Proto-Oncogene C-ErbB-1; EC 2.7.10.1; HER1; Epidermal Growth Factor Receptor (Avian Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog); Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog (Avian); Avian Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog; Epidermal Growth Factor Receptor Tyrosine Kinase Domain; Cell Proliferation-Inducing Protein 61; Cell Growth Inhibiting Protein 40; EGFR VIII; EC 2.7.10; NISBD2; PIG61; MENA
Gene ID	1956.0
SwissProt ID	P00533

Immunogen

Recombinant protein of human EGFR

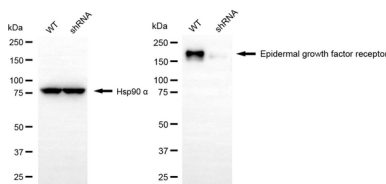
Background

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor, thus inducing receptor dimerization and tyrosine autophosphorylation leading to cell proliferation. Mutations in this gene are associated with lung cancer. EGFR is a component of the cytokine storm which contributes to a severe form of Coronavirus Disease 2019 (COVID-19) resulting from infection with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). [provided by RefSeq, Jul 2020]

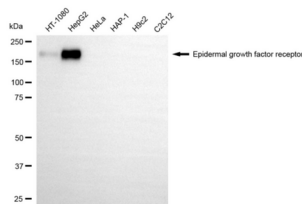
Research Area

Signal Transduction,Cell Biology,Microbiology,Cancer,Neuroscience

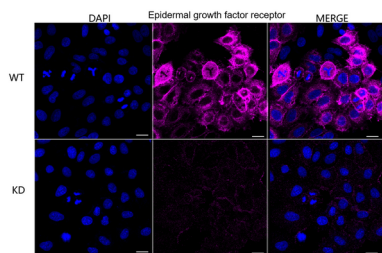
Image Data



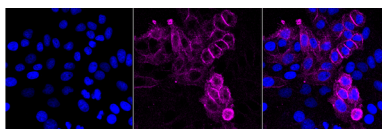
Western blotting analysis using epidermal growth factor receptor antibody (KVA00680). Epidermal growth factor receptor expression in wild type (WT) and epidermal growth factor receptor (EGFR) shRNA knockdown (KD) HepG2 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with epidermal growth factor receptor antibody (KVA00680, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



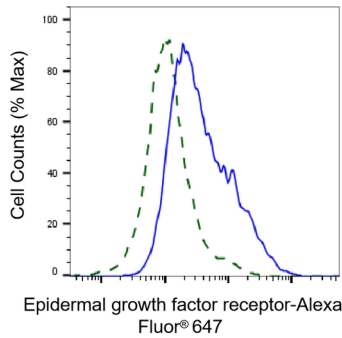
Western blotting analysis using epidermal growth factor receptor antibody (KVA00680). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with epidermal growth factor receptor antibody (KVA00680, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



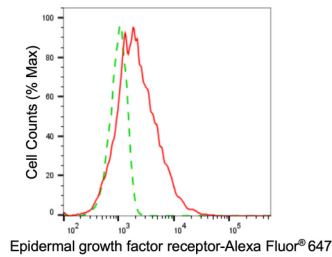
Immunocytochemical staining of HepG2 cells using Epidermal growth factor receptor antibody (KVA00680, 1:1,000), Top panel: wild-type (WT); Bottom panel: Adiponectin receptor 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Epidermal growth factor receptor was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with Epidermal growth factor receptor antibody (KVA00680, 1:1,000) . Nuclei were stained blue with DAPI; Epidermal growth factor receptor was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Low. Scale bar, 20 µm.



Validation of Epidermal growth factor receptor knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HepG2 cells were stained with Epidermal growth factor receptor antibody (KVA00680, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Epidermal growth factor receptor expression in HepG2 cells using Epidermal growth factor receptor antibody (KVA00680, 1:2,000). Green, isotype control; red, Epidermal growth factor receptor.