



# ELK Biotechnology

EGFR Mouse mAb

Catalog NO.: EM1044

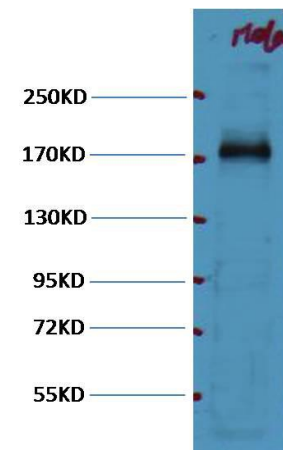
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## Overview

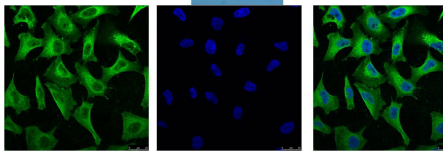
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Product name	EGFR Mouse Monoclonal antibody
Source	Mouse
Applications	WB IHC IF
Species reactivity	Human
Recommended dilutions	<b>WesternBlot:1/1000</b> <b>Immunofluorescence:1/100-200</b> <b>Immunohistochemistry:1/200-500</b> <b>NOTE: Optimal dilutions should be determined by the end user.</b>
Immunogen	Synthetic Peptide
Species	Human
Storage	PBS with 0.02% sodium azide and 50% glycerol pH 7.4. Store at -20° C. Avoid repeated freeze-thaw cycles.
Isotype	IgG1
Clonality	Monoclonal
Concentration	1 mg/ml
Observed band	<b>170kDa</b>
GeneID (Human)	1956
Human Swiss-Prot No.	P00533
Cellular localization	Secreted and Cell membrane. Endoplasmic reticulum membrane
Alternative Names	Epidermal Growth Factor Receptor ;ErbB-1; ErbB1; ER1; ERB-B1; MENA; HER1; Erythroblastic Leukemia Viral(v-Erb-B)oncogene HomologAvian; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1
Background	The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. Known ligands include EGF TGFA/TGF-alpha amphiregulin epigen/EPGN BTC/betacellulin

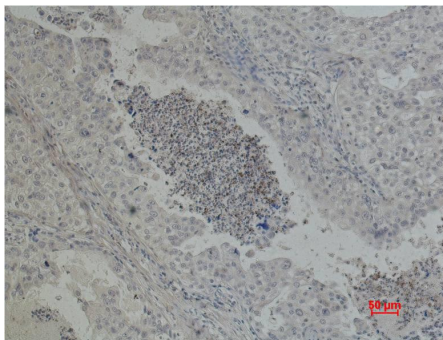
epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades.  $\beta$ -Actin is one of six different actin isoforms that have been identified. The actin molecules found in cells of various species and tissues tend to be very similar in their immunological and physical properties. Therefore Antibodies against  $\beta$ -Actin are useful as loading controls for Western Blotting. However it should be noted that levels of  $\beta$ -Actin may not be stable in certain cells. For example expression of  $\beta$ -Actin in adipose tissue is very low and therefore  $\beta$ -Actin should not be used as loading control for these tissues.



Western blot analysis of HeLa with EGFR mAb diluted at:1000.



IF analysis of HeLa with EM1044(Left) and DAPI (Right) diluted at:100.



Immunohistochemical analysis of paraffin-embedded Human Lung carcinoma using EGFR (EM1044) Mouse mAb diluted at:500.