# **Elabscience**®

## **EGFR Polyclonal Antibody**

#### catalog number: E-AB-31285

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human;Mouse;Rat
Immunogen	Synthesized peptide derived from human EGFR around the non-phosphorylation site
	of Thr678.
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 0.5% protein
	protectant and 50% glycerol.
Applications	Recommended Dilution
WB	1:500-1:2000
IHC	1:100-1:300
Data	
	(kD) <sup>291</sup>
	170-
	130-
	95-
	n-
	55-
Western Blot analysis of	f 293 cells with EGFR Polyclonal
Antibody.	
Observed-MW:175 kDa	
Calculated-MW:134 kDa	
Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

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Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

#### Background

Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. 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. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the Gprotein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin.Isoform 2 may act as an antagonist of EGF action.

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