EGF Polyclonal Antibody

catalog number: AN007200L

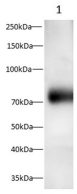
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Rat
Immunogen	Recombinant Human EGF protein expressed by Mammalian
Host	Rabbit
Isotype	IgG
Purification	Antigen Affinity Purification
Conjugation	Unconjugated
Buffer	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

Applications	Recommended Dilution
WB	1:500-1:1000

Data



Western blot with Anti EGF Polyclonal antibody at dilution of 1:1000. Lane 1: Rat kidney tissue lysate.

Observed-MW:80 kDa

Calculated-MW:133 kDa

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

Epidermal growth factor (EGF) is the founding member of the EGF family that also includes TGF-alpha, amphiregulin (AR), betacellulin (BTC), epiregulin (EPR), heparin-binding EGF-like growth factor (HB-EGF), epigen, and the neuregulins (NRG)-1 through -6. Members of the EGF family share a structural motif, the EGF-like domain, which is characterized by three intramolecular disulfide bonds that are formed by six similarly spaced conserved cysteine residues. All EGF family members are synthesized as type I transmembrane precursor proteins that may contain several EGF domains in the extracellular region. The mature proteins are released from the cell surface by regulated proteolysis. The 1207 amino acid (aa) human EGF precursor contains nine EGF domains and nine LDLR class B repeats. The mature protein consists of 53 aa and is generated by proteolytic excision of the EGF domain proximal to the transmembrane region. Mature human EGF shares 70% aa sequence identity with mature mouse and rat EGF. EGF is present in various body fluids, including blood, milk, urine, saliva, seminal fluid, pancreatic juice, cerebrospinal fluid, and amniotic fluid. Four ErbB (HER) family receptor tyrosine kinases including EGFR/ErbB1, ErbB2, ErbB3 and ErbB4, mediate responses to EGF family members. These receptors undergo a complex pattern of ligand induced homo- or hetero-dimerization to transduce EGF family signals . EGF binds ErbB1 and depending on the context, induces the formation of homodimers or heterodimers containing ErbB2. Dimerization results in autophosphorylation of the receptor at specific tyrosine residues to create docking sites for a variety of signaling molecules. Biological activities ascribed to EGF include epithelial development, angiogenesis, inhibition of gastric acid secretion, fibroblast proliferation, and colony formation of epidermal cells in culture.