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Rabbit Anti-EGF antibody

SL2009R

Product Name:	EGF
Chinese Name:	表皮生长因子抗体
Alias:	Beta urogastrone; Epidermal Growth Factor; Pro epidermal growth factor; URG; Urogastrone; EGF; Epidermal Growth Factor; HOMG4; OTTHUMP00000219721; OTTHUMP00000219722; Pro epidermal growth factor; URG; Urogastrone; EGF_MOUSE.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Mouse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	6/130kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse EGF:31-53/53
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the epidermal growth factor superfamily. The encoded protein is synthesized as a large precursor molecule that is proteolytically cleaved to generate the 53-amino acid epidermal growth factor peptide. This protein acts a potent mitogenic factor that plays an important role in the growth, proliferation and

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	differentiation of numerous cell types. This protein acts by binding the high affinity cell surface receptor, epidermal growth factor receptor. Defects in this gene are the cause of hypomagnesemia type 4. Dysregulation of this gene has been associated with the growth and progression of certain cancers. Alternate splicing results in multiple transcript variants.[provided by RefSeq, May 2010] **Function:** EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6. **Subunit:** Interacts with EGFR and promotes EGFR dimerization. Interacts with RHBDF1; may retain EGF in the endoplasmic reticulum and regulates its degradation through the endoplasmic reticulum-associated degradation (ERAD). Interacts with RHBDF2. **Subcellular Location:** Secreted and Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus membrane. Nucleus membrane. Endosome. Endosome membrane. In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER. Endocytosed upon activation by ligand. **Tissue Specificity:** Expressed in kidney, salivary gland, cerebrum and prostate. **Post-translational modifications:** Phosphorylation at Ser-695 is partial and occurs only if Thr-693 is phosphorylated. Phosphorylation at Thr-678 and Thr-693 by PRKD1 inhibits EGF-induced MAPK8/JNK1 activation. Dephosphorylation by PTPRJ prevents endocytosis and stabilizes the receptor at the plasma membrane. Autophosphorylation at Tyr-1197 is stimulated by methylation at Arg-1199 and enhances interaction with PTPN6. Autophosphorylation at Tyr-1092 and/or Tyr-1110 recruits STAT3. Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occur. Deubiquitinated by OTUD7B, preventing degradation. Methylated. Methylation at Arg-1199 by PRMT5 positively stimulates phosphorylation at Tyr-1197. **DISEASE:** Defects in EGF are the cause of hypomagnesemia type 4 (HOMG4) [MIM:611718]; also known as renal hypomagnesemia normocalciuric. HOMG4 is a disorder characterized by massive renal hypomagnesemia and normal levels of serum calcium and calcium excretion. Clinical features include seizures, mild-to mederate psychomotor retardation, and brisk tendon reflexes.

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Similarity:
Contains 9 EGF-like domains.
Contains 9 LDL-receptor class B repeats.

SWISS:
P01132

Gene ID:
13645

Database links:

Entrez Gene: 13645Mouse

Entrez Gene: 1950Human

Omim: 131530Human

SwissProt: P01133Human

SwissProt: P01132Mouse

Unigene: 419815Human

Unigene: 252481Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

表皮生长因子是一种小肽,由53个氨基酸残基组成,
是类EGF大家族的一个成员,是一种多功能的生长因子,在体内体外都对多种组织细胞有强烈的促分裂作用。EGF同应答细胞表面的特异受体结合,一旦结合,便促进受体二聚化并使细胞质位点磷酸化。被激活的受体至少可与5种具有不同信号序列的蛋白结合,进行Signal
transduction,在翻译水平上对蛋白质的合成起调节作用。此外EGF可提高细胞内DNA拓扑异构酶活性,也可促进一些与增殖有关的基因表达,如myc 、fos等。

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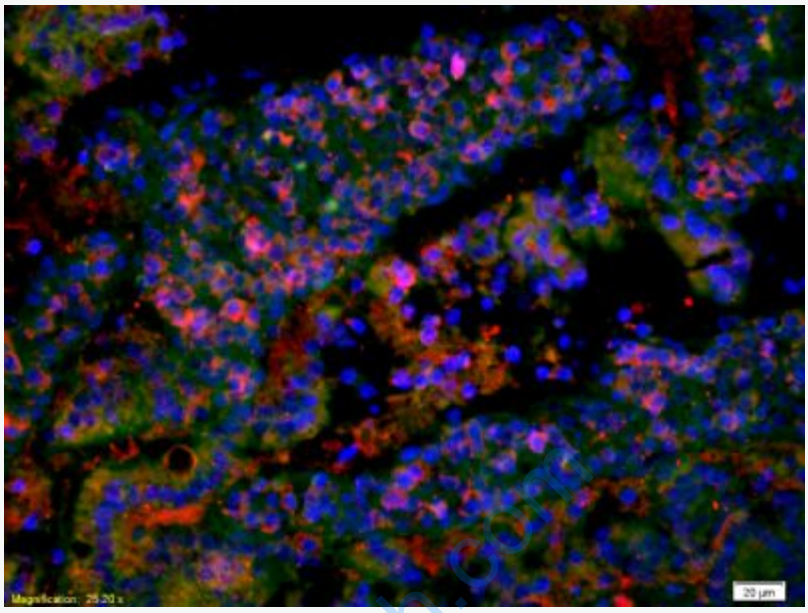
Picture:	
	Tissue/cell: Mouse intestine tissue;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-EGF(mouse) Polyclonal Antibody, Unconjugated(SL2009R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL2009R)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei

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