

# Rabbit Anti-IGF II antibody

# SL0015R

Duodust Norman	IGF II
Product Name:	
Chinese Name:	胰岛素样生长因子-II抗体
Alias:	C11orf43; FLJ22066; FLJ44734; IGF 2; IGF II; IGF-II; IGF2; IGF2_HUMAN; IGFII; INSIGF; insulin like growth factor 2 (somatomedin A); Insulin like Growth Factor 2; Insulin like growth factor II; Insulin like growth factor II precursor; Insulin like growth factor type 2; Insulin-like Growth Factor 2; Insulin-like Growth Factor 2; pp9974; Preptin; putative insulin like growth factor II associated protein; Somatomedin A; Somatomedin A;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,
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:	7.4kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IGF II:25-51/180
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:	The IGF2 gene encodes a member of the insulin family of polypeptide growth factors that is involved in development and growth. It is expressed only from the paternally

inherited allele and is an imprinted gene which is a candidate gene for eating disorders. There is a read-through, INS-IGF2, which aligns to this gene at the 3' region and to the upstream INS gene at the 5' region. Two alternatively spliced transcript variants encoding the same protein have been found for this gene. Insulin Like Growth Factor-2 (IGF-2) is a polypeptide growth factor, which stimulates the proliferation of a wide range of cell types.

# **Function:**

The insulin-like growth factors possess growth-promoting activity. In vitro, they are potent mitogens for cultured cells. IGF-II is influenced by placental lactogen and may play a role in fetal development.

Preptin undergoes glucose-mediated co-secretion with insulin, and acts as physiological amplifier of glucose-mediated insulin secretion. Exhibits osteogenic properties by increasing osteoblast mitogenic activity through phosphoactivation of MAPK1 and MAPK3.

### **Subcellular Location:**

Secreted.

# Post-translational modifications:

O-glycosylated with core 1 or possibly core 8 glycans. Thr-96 is a minor glycosylation site compared to Thr-99.

# **DISEASE:**

Epigenetic changes of DNA hypomethylation in IGF2 are a cause of Silver-Russell syndrome (SRS) [MIM:180860]. A clinically heterogeneous condition characterized by severe intrauterine growth retardation, poor postnatal growth, craniofacial features such as a triangular shaped face and a broad forehead, body asymmetry, and a variety of minor malformations. The phenotypic expression changes during childhood and adolescence, with the facial features and asymmetry usually becoming more subtle with age.

# Similarity:

Belongs to the insulin family.

#### **SWISS:**

P01344

#### Gene ID:

3481

### Database links:

Entrez Gene: 3481 Human

Entrez Gene: 281240 Cow

Entrez Gene: 16002 Mouse

Entrez Gene: 24483 Rat

Omim: 147470 Human

SwissProt: P07456 Cow

SwissProt: P01344 Human

SwissProt: P09535 Mouse

SwissProt: P01346 Rat

Unigene: 272259 Human

Unigene: 718427 Human

Unigene: 3862 Mouse

<u>Unigene: 118681</u> Rat

Unigene: 224460 Rat

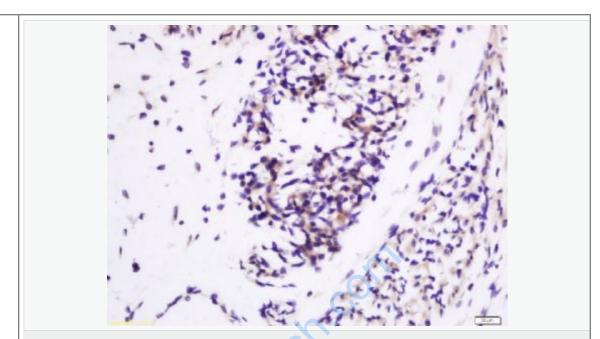
# Important Note:

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

胰岛素样生长因子2(IGF-2又称Somatomedin

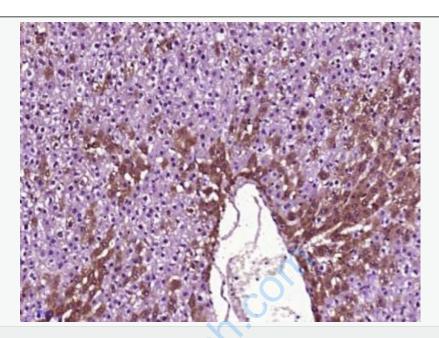
A), 是一种生长调节激素, 由肝分泌并入血液循环的中性多肽, 具有调节生长和代谢、胰岛素样及促细胞分裂的活性, 为主要的胚胎生长因子。

biofectus con



Picture:

Tissue/cell: rat placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-IGF II Polyclonal Antibody, Unconjugated(SL0015R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IGF II) Polyclonal Antibody, Unconjugated (SL0015R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.