

Rabbit Anti-IGF2 antibody

SL0015R

Product Name IGF2

Chinese Name 胰岛素样生长因子-II 抗体

Alias IGF2_HUMAN; Insulin-like growth factor II; IGF-II; IGF II; Somatomedin-A; T3M-11-derived growth factor; Insulin-like growth factor II; Insulin-like growth factor II Ala-25 Del; Preptin; PP1446; Insulin like Growth Factor 2;

Research Area immunology Developmental biology Signal transduction Growth factors and hormones Diabetes

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Rat, (predicted: Mouse, Dog, Pig, Cow, Rabbit, Sheep,)

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 7.4kDa

Cellular localization Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human IGF2: 25-51/180

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

PubMed [PubMed](#)

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.

**Product
Detail**

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

[SwissProt: P07456](#) Cow

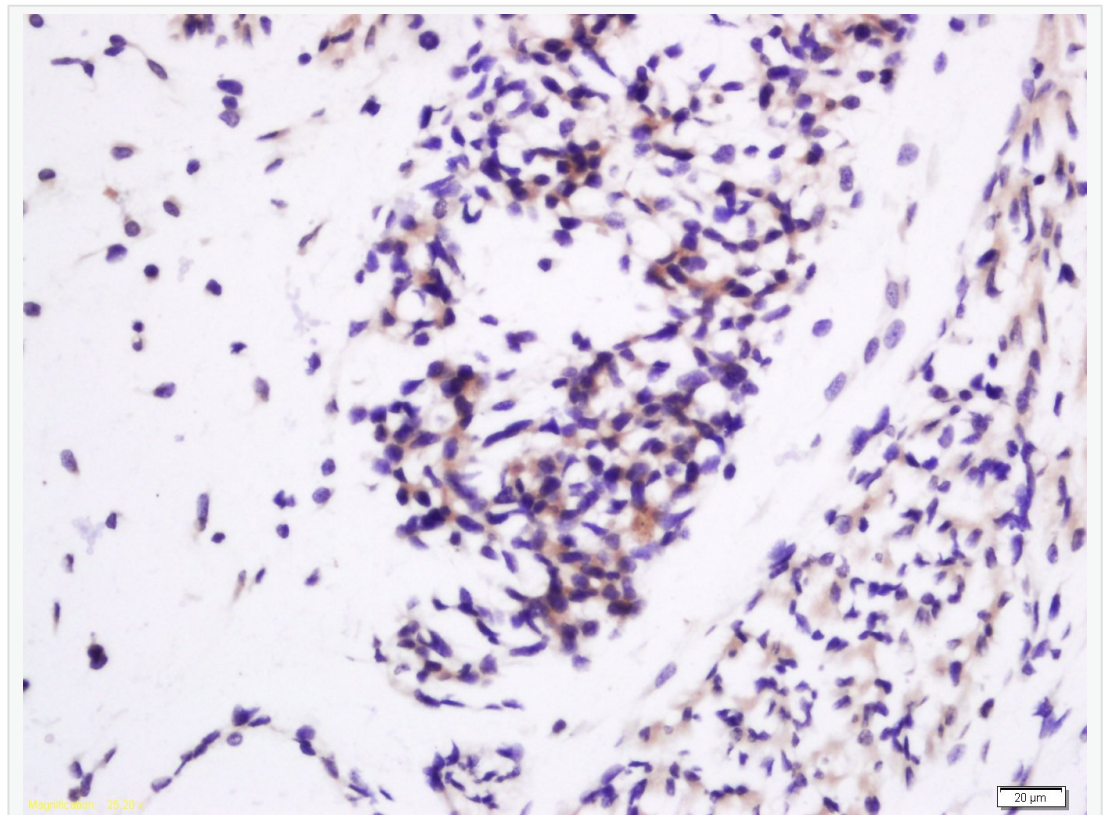
[SwissProt: P01344](#) Human

[SwissProt: P09535](#) Mouse

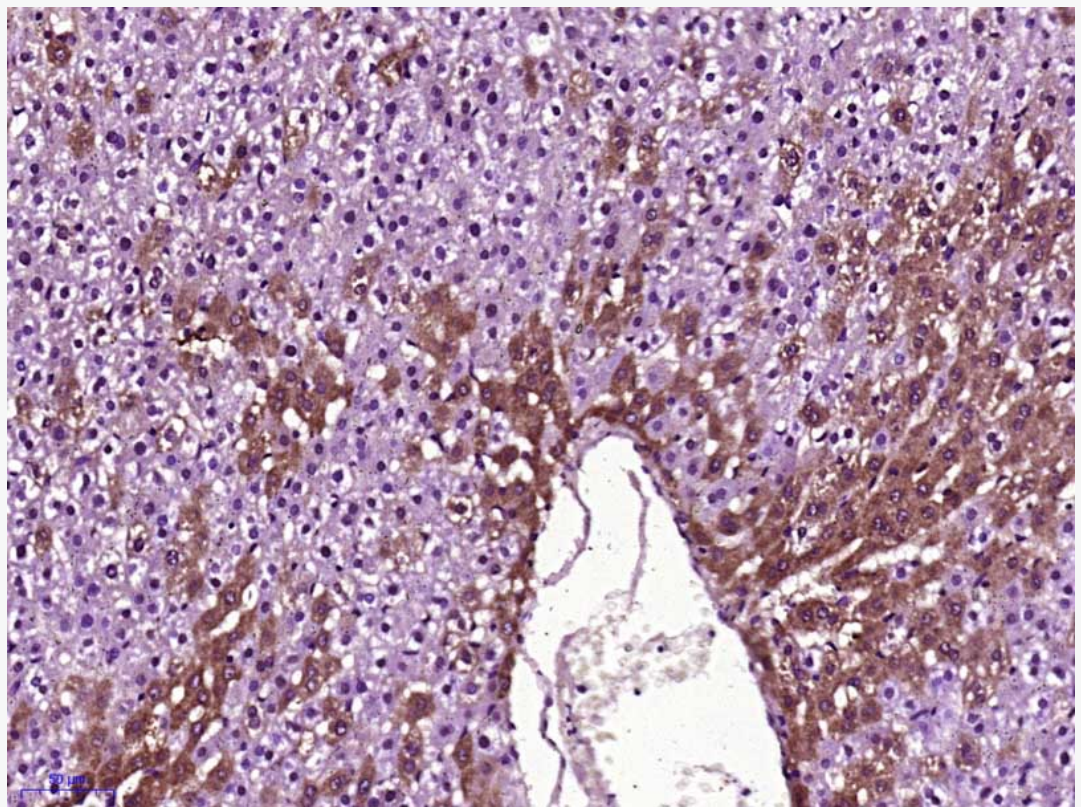
[SwissProt: P01346](#) Rat

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。

**Product
Picture**

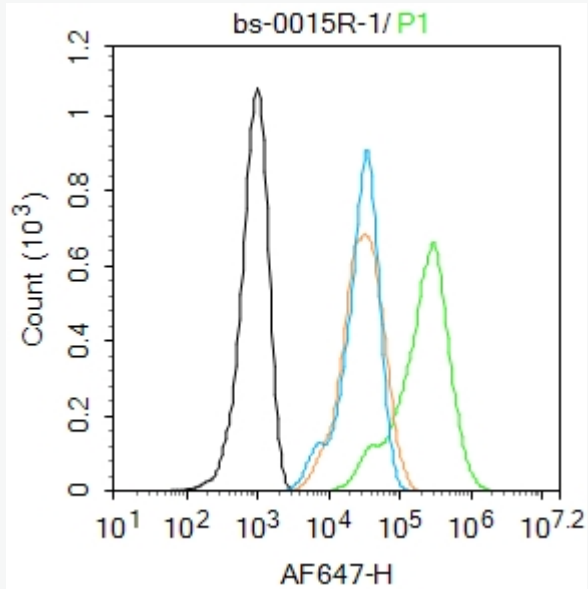


Tissue/cell: rat placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-IGF 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.



Blank control: HepG2.

Primary Antibody (green line): Rabbit Anti-IGF II antibody (SL0015R)

Dilution: 1µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then

permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.