



Rabbit Anti-Amylin antibody

SL0057R

Product Name:	Amylin
Chinese Name:	Diabetes相关肽/胰岛淀粉样肽抗体
Alias:	Islet amyloid polypeptide; IAPP; DAP; Diabetes associated peptide; IAP; Insulinoma amyloid peptide.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Rabbit,
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:	10kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Amylin:1-37/89
Isotype:	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:	Amylin is commonly found in pancreatic islets of patients suffering diabetes mellitus type II, or harboring an insulinoma. While the association of amylin with the development of type II diabetes has been known for some time, a direct causative role for amylin has been harder to establish. Recent results suggest that amylin, like the related beta amyloid (A β) associated with Alzheimer's disease, can induce apoptotic cell death in particular cultured cells, an effect that may be relevant to the development

of type II diabetes.

Function:

Selectively inhibits insulin-stimulated glucose utilization and glycogen deposition in muscle, while not affecting adipocyte glucose metabolism.

Subunit:

Interacts with IDE and INS. Can form homodimers. Interaction with INS inhibits homodimerization and fibril formation.

Subcellular Location:

Secreted.

Post-translational modifications:

Amyloid fibrils are degraded by IDE.

Similarity:

Belongs to the calcitonin family.

SWISS:

P10997

Gene ID:

3375

Database links:

[Entrez Gene: 751513](#)Cat

[Entrez Gene: 3375](#)Human

[Entrez Gene: 15874](#)Mouse

[Entrez Gene: 100009489](#)Rabbit

[Entrez Gene: 24476](#)Rat

[Olim: 147940](#)Human

[SwissProt: P12967](#)Cat

[SwissProt: P10997](#)Human

[SwissProt: P12968](#)Mouse

[SwissProt: Q07334](#)Rabbit

[SwissProt: P12969](#)Rat

[Unigene: 46835](#)Human

[Unigene: 415](#)Mouse

[Unigene: 11394Rat](#)

Important Note:

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

胰岛淀粉样肽(islet amyloid polypeptide,IAPP)又称amylin

或Diabetes相关肽是由胰腺β细胞产生的含37个氨基酸的一种短肽。IAPP降低胰岛素的敏感性,抑制肌肉组织中葡萄糖的摄取和糖原的合成,抑制病人摄取食物。

据报道胰腺癌病人血浆IAPP浓度显著升高,而在胃癌、结肠癌、肝癌、肺癌中正常,在Diabetes人中正常或稍低。由于血浆IAPP浓度上升是胰腺癌的一个早期特征,因而检测IAPP或IAPP释放因子对于胰腺癌的早期诊断是有价值的。但目前还不清楚IAPP释放因子的生化特性。

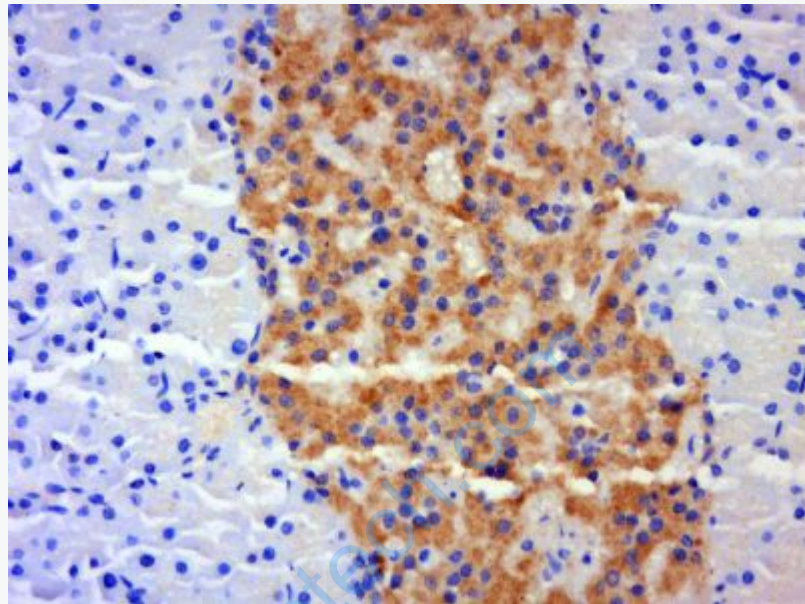
胰岛淀粉样多肽又称胰淀素 IAPP

,胰岛淀粉样多肽在胰岛β细胞中合成。并在β细胞中分泌,在各种疾病因素的诱导和激发作用下,IAPP生成异常增加而代谢降低,从而使其在胰岛中聚集沉淀。

过量沉积的IAPP使胰岛βThe cell

membrane和胰岛β细胞的超微结构破坏,从而抑制了胰岛素的分泌和对糖代谢平衡的协调作用,同时也抑制了葡萄糖对胰岛素分泌的刺激作用,从而导致了胰岛素分泌的不足,糖代谢平衡失调,引发了Diabetes,胰岛淀粉多肽是引发Diabetes的根本原因。由此可见如果能消除过量的IAPP,胰岛β细胞的功能就可以恢复正常,Diabet

es就有可能治愈。

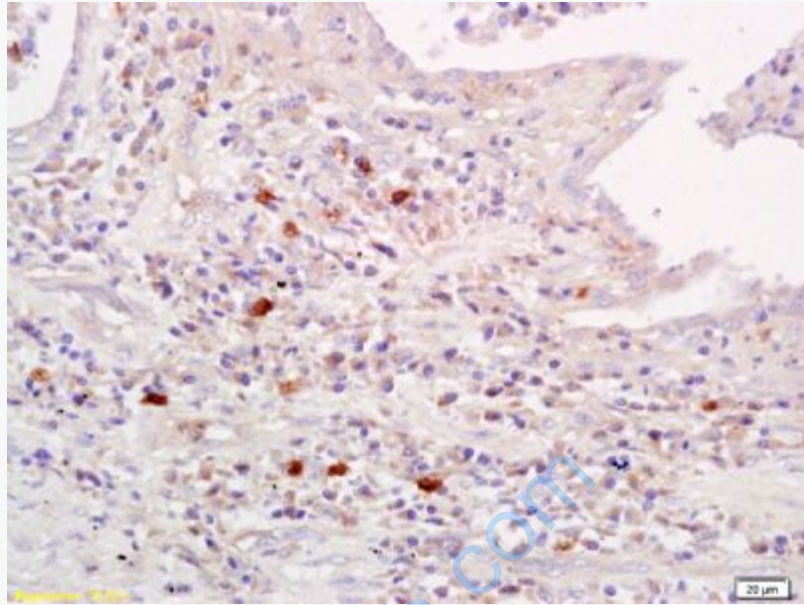


Picture:

Tissue/cell: Rat pancreas 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-Amylin Polyclonal Antibody, Unconjugated(SL0057R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human lung carcinoma; 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-Amylin Polyclonal Antibody, Unconjugated(SL0057R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining