

Rabbit Anti-IRAP antibody

SL18229R

Product Name:	IRAP
Chinese Name:	胰岛素调节膜氨基肽酶抗体
Alias:	eucyl-cystinyl aminopeptidase; angiotensin IV receptor; AT (4) receptor; CAP; Cystinyl aminopeptidase; insulin regulated aminopeptidase; insulin regulated membrane aminopeptidase; insulin responsive aminopeptidase; Insulin-regulated membrane aminopeptidase; Insulin-responsive aminopeptidase; IRAP; LCAP_HUMAN; Leucyl-cystinyl aminopeptidase; LNPEP; OTase; Oxytocinase; P-LAP; Placental leucine aminopeptidase; PLAP; pregnancy serum form; vasopressinase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	117kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IRAP:1-100/1025
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:	<u>PubMed</u>
Product Detail:	This gene encodes a zinc-dependent aminopeptidase that cleaves vasopressin, oxytocin, lys-bradykinin, met-enkephalin, dynorphin A and other peptide hormones. The protein

can be secreted in maternal serum, reside in intracellular vesicles with the insulinresponsive glucose transporter GLUT4, or form a type II integral membrane glycoprotein. The protein catalyzes the final step in the conversion of angiotensinogen to angiotensin IV (AT4) and is also a receptor for AT4. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Function:

Release of an N-terminal amino acid, cleaves before cysteine, leucine as well as other amino acids. Degrades peptide hormones such as oxytocin, vasopressin and angiotensin III, and plays a role in maintaining homeostasis during pregnancy. May be involved in the inactivation of neuronal peptides in the brain. Cleaves Met-enkephalin and dynorphin. Binds angiotensin IV and may be the angiotensin IV receptor in the brain.

Subcellular Location:

Cell membrane. In brain only the membrane-bound form is found. The protein resides in intracellular vesicles together with GLUT4 and can then translocate to the cell surface in response to insulin and/or oxytocin. Localization may be determined by dileucine internalization motifs, and/or by interaction with tankyrases and Secreted. During pregnancy serum levels are low in the first trimester, rise progressively during the second and third trimester and decrease rapidly after parturition.

Tissue Specificity:

Highly expressed in placenta, heart, kidney and small intestine. Detected at lower levels in neuronal cells in the brain, in skeletal muscle, spleen, liver, testes and colon.

Post-translational modifications:

The pregnancy serum form is derived from the membrane-bound form by proteolytic processing.

N-glycosylated.

Similarity:

Belongs to the peptidase M1 family.

SWISS:

Q9UIQ6

Gene ID:

4012

Database links:

Entrez Gene: 4012 Human

Omim: 151300 Human

SwissProt: Q9UIQ6 Human

Unigene: 527199 Human

<u>Unigene: 656905</u> Human

Important Note:

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

