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KISS1 Rabbit pAb

Catalog # AP100143

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q15726
Other Accession	Q15726
Reactivity	Rat, Human, Mouse
Predicted	Pig, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14705
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Kiss-1
Epitope Specificity	81-145/145
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the KISS1 family.
Post-translational modifications	Processed by MMP2 and MMP9.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene is a metastasis suppressor gene that suppresses metastases of melanomas and breast carcinomas without affecting tumorigenicity. The encoded protein may inhibit chemotaxis and invasion and thereby attenuate metastasis in malignant melanomas. Studies suggest a putative role in the regulation of events downstream of cell-matrix adhesion, perhaps involving cytoskeletal reorganization. A protein product of this gene, kisspeptin, stimulates gonadotropin-releasing hormone (GnRH)-induced gonadotropin secretion and regulates the pubertal activation of GnRH nuerons. A polymorphism in the terminal exon of this mRNA results in two protein isoforms. An adenosine present at the polymorphic site represents the third position in a stop codon. When the adenosine is absent, a downstream stop codon is utilized and the encoded protein extends for an additional seven amino acid residues. [provided by RefSeq, Mar 2012]

Additional Information

Gene ID	3814
Other Names	HH13; KiSS-1; Eseptin; KISS1_HUMAN; KISS1; Kisspeptin-1; KISS1_RAT; KiSS-1 metastasis suppressor; prepro-kisspeptin; kisspeptin
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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

Protein Information

Name	KISS1
Function	Kisspeptins are ligands for the G protein-coupled receptor KISS1R/GPR54 (PubMed:11385580, PubMed:11457843, PubMed:11527393, PubMed:12879005, PubMed:15020672, PubMed:15596153). The hypothalamic KISS1/KISS1R signaling system plays a central role in the regulation of the hypothalamic-pituitary-gonadal reproductive axis by modulating the secretion of gonadotropin-releasing hormone (GnRH) from GnRH neurons (PubMed:15219839, PubMed:15598687, PubMed:22335740). In these neurons, kisspeptin binding to its receptor activates G(q)-dependent signaling, leading to phospholipase C (PLC) activation, and hydrolysis of phosphatidylinositol 4,5-bisphosphate (PIP2) (PubMed:15598687, PubMed:22335740). The subsequent rise in intracellular calcium levels results in the inhibition of inward rectifier potassium channels and activation of TRPC-like cation channels, leading to GnRH neurons depolarization and stimulation (By similarity). In addition to this pathway, kisspeptin also triggers G(q)-independent signaling via beta- arrestin, leading to MAPK cascade activation and ERK1/ERK2 phosphorylation (PubMed:25147978). Kisspeptins are also involved in the regulation of other processes including cell growth, cell proliferation and cell migration (PubMed:11385580, PubMed:11457843, PubMed:11527393, PubMed:12879005, PubMed:15020672, PubMed:15596153).
Cellular Location	Secreted.
Tissue Location	High expression in placenta (PubMed:8944003, PubMed:11385580, PubMed:11457843, PubMed:12574233). Expression levels increased in both early placentas and molar pregnancies and are reduced in choriocarcinoma cells. In first trimester trophoblasts is expressed at higher levels than at term of gestation, but only expressed in the villous trophoblast (PubMed:15020672). Also expressed in testis, pancreas, liver, small intestine.

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