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PASK/STK37 Rabbit pAb

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Catalog # AP57704

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96RG2
Reactivity	Mouse
Predicted	Rat, Human, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	142929
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PASK/STK37
Epitope Specificity	31-130/1323
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
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 encodes a member of the serine/threonine kinase family that contains two PAS domains. Expression of this gene is regulated by glucose, and the encoded protein plays a role in the regulation of insulin gene expression. Downregulation of this gene may play a role in type 2 diabetes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]

Additional Information

Gene ID	23178
Other Names	PAS domain-containing serine/threonine-protein kinase, PAS-kinase, PASKIN, hPASK, 2.7.11.1, PASK, KIAA0135
Dilution	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	PASK

Synonyms	KIAA0135
Function	Serine/threonine-protein kinase involved in energy homeostasis and protein translation. Phosphorylates EEF1A1, GYS1, PDX1 and RPS6. Probably plays a role under changing environmental conditions (oxygen, glucose, nutrition), rather than under standard conditions. Acts as a sensor involved in energy homeostasis: regulates glycogen synthase synthesis by mediating phosphorylation of GYS1, leading to GYS1 inactivation. May be involved in glucose-stimulated insulin production in pancreas and regulation of glucagon secretion by glucose in alpha cells; however such data require additional evidences. May play a role in regulation of protein translation by phosphorylating EEF1A1, leading to increase translation efficiency. May also participate in respiratory regulation.
Cellular Location	Cytoplasm. Nucleus. Note=Localizes in the nucleus of testis germ cells and in the midpiece of sperm tails
Tissue Location	Ubiquitously expressed, with slightly higher expression in brain, prostate and testis. Reduced expression was found in placenta. Present in germ cells of testis and in the midpiece of sperm tails (at protein level)

Background

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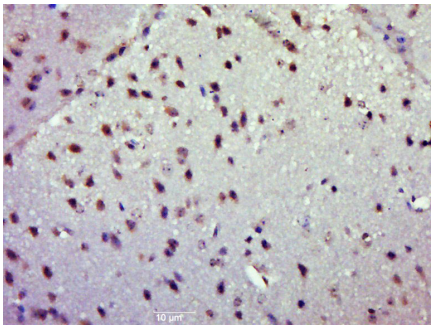
Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (PASK) Polyclonal Antibody, Unconjugated (AP57704) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.