

## Rabbit Anti-PASK/STK37 antibody

SL19896R

Product Name:	PASK/STK37
Chinese Name:	丝氨酸/苏氨酸蛋白激酶37抗体
Alias:	DKFZP4340051; DKFZp686P2031; hPASK; KIAA0135; MGC93882; mKIAA0135; PAS domain containing serine/threonine kinase; PAS domain containing serine/threonine protein kinase; PAS domain-containing serine/threonine-protein kinase; PAS kinase; PAS serine/threonine kinase; PAS-kinase; Pask; PASK_HUMAN; PASKIN; STK 37; STK37.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Horse,
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:	143kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PASK/STK37:31-130/1323
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:	PubMed
Product Detail:	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]

## 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 to respiratory regulation.

Subcellular Location: Cytoplasm.

**Tissue Specificity:** 

Ubiquitously expressed, with slightly higher expression in brain, prostate and testis. Reduced expression was found in placenta.

Post-translational modifications: Autophosphorylated on Thr-1161 and Thr-1165.

## Similarity:

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. Contains 2 PAS (PER-ARNT-SIM) domains. Contains 1 protein kinase domain.

SWISS: Q96RG2

**Gene ID:** 23178

Database links:

Entrez Gene: 23178 Human

Entrez Gene: 269224 Mouse

<u>Omim: 607505</u> Human

SwissProt: Q96RG2 Human

	SwissProt: Q8CEE6 Mouse
	Unigene: 397891 Human
	Unigene: 379454 Mouse
	<b>Important Note:</b> This product as supplied is intended for research use only, not for use in human,
	therapeutic or diagnostic applications.
Picture:	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 (SL19896R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp- 0023) for 20 minutes and DAB staining.