

PASK Protein, Human (Sf9, GST)

Cat. No.:	HY-P701735
Synonyms:	PASK; PAS domain-containing serine/threonine-protein kinase; PAS-kinase; PASKIN; hPASK
Species:	Human
Source:	Sf9 insect cells
Accession:	Q96RG2 (S949-S1323)
Gene ID:	23178
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>PASK, a serine/threonine-protein kinase, intricately contributes to energy homeostasis and protein translation. It exerts its regulatory influence by phosphorylating key targets, including EEF1A1, GYS1, PDX1, and RPS6. Notably, PASK appears to play a pivotal role in response to changing environmental conditions, such as alterations in oxygen levels, glucose availability, and nutritional status, rather than functioning under standard conditions. Acting as a sensor for energy homeostasis, PASK orchestrates glycogen synthase synthesis through the phosphorylation of GYS1, resulting in GYS1 inactivation. While its potential involvement in glucose-stimulated insulin production in the pancreas and the regulation of glucagon secretion by glucose in alpha cells awaits further substantiation, PASK is suggested to contribute to the modulation of protein translation. By phosphorylating EEF1A1, PASK enhances translation efficiency, implicating its role in finely tuning cellular responses to varying environmental cues. Additionally, PASK's potential engagement in respiratory regulation further underscores its multifaceted role in cellular homeostasis.</p>
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Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA