

Product Data Sheet

CASK Protein, Human (sf9, His-GST)

Cat. No.:	HY-P74348
Synonyms:	Peripheral plasma membrane protein CASK; hCASK; CASK; LIN2
Species:	Human
Source:	Sf9 insect cells
Accession:	O14936-4 (A2-Y898)
Gene ID:	8573
Molecular Weight:	Approximately 120 kDa

PROPERTIES	
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.4, 10% Glycerol. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The CASK Protein is a multidomain scaffolding Mg(2+)-independent protein kinase that catalyzes phosphotransfer from ATP
	to various proteins, including NRXN1. It plays a pivotal role in synaptic transmembrane protein anchoring and ion channel
	trafficking, contributing to neural development and the regulation of gene expression through interaction with the
	transcription factor TBR1. CASK binds to cell-surface proteins like amyloid precursor protein, neurexins, and syndecans,
	suggesting its involvement in mediating connections between the extracellular matrix and the actin cytoskeleton,
	potentially through interactions with syndecan and the actin/spectrin-binding protein 4.1. Additionally, CASK is a
	component of the LIN-10-LIN-2-LIN-7 complex, which collaborates with the motor protein KIF17 to transport vesicles
	containing N-methyl-D-aspartate (NMDA) receptor subunit NR2B along microtubules, highlighting its intricate role in cellular
	processes and neuronal function.

Caution: Product has not been fully validated for medical applications. For research use only.

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