KLHL3 Protein, Human (Sf9)

Cat. No.:	HY-P701585
Synonyms:	KLHL3; Kelch-like protein 3
Species:	Human
Source:	Sf9 insect cells
Accession:	Q9UH77 (E2-L587)
Gene ID:	26249
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.
Reconsititution	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	KLHL3 functions as a substrate-specific adapter within the BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex, playing a crucial role in regulating ion transport in the distal nephron. The BCR(KLHL3) complex orchestrates the ubiquitination and subsequent degradation of WNK1, WNK4, and WNK3, which are activators of the Na-Cl cotransporter SLC12A3/NCC in distal convoluted tubule cells of the kidney. This regulatory mechanism finely tunes NaCl reabsorption, contributing to overall electrolyte balance. Additionally, the BCR(KLHL3) complex targets CLDN8, a tight-junction protein crucial for paracellular chloride transport in the kidney, for ubiquitination and degradation. Through its role in protein ubiquitination, KLHL3 emerges as a key component in the dynamic regulation of ion transport processes, highlighting its significance in maintaining renal function.

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