

Product datasheet for PH305092

RACK1 (NM_006098) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	GNB2L1 MS Standard C13 and N15-labeled recombinant protein (NP_006089)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205092
Predicted MW:	35.1 kDa
Protein Sequence:	>RC205092 protein sequence Red=Cloning site Green=Tags(s) MTEQMTRLRGTLKGHNGWVTQIATTPQFPDMILSASRDKTIIMWKLTRDETNYGIPQRALRGHSHFVSDVV ISSDGFALSGSWDGTLRRLWDLTTGTTTRRFVGHTKDVLVAFSSDNRQIVSGSRDKTIKLWNTLGVCKY TVQDESHSEWVSCVRFSPNSSNPIIVSCGWDLVKVWNLANCKLKTNHIGHTGYLNTVTVSPDGSLCASG GKDGQAMLWDLNEGKHL YLDGGDIINALCFSPNRYWLC AATGPSIKIWDLEGKIIIVDELKQEVISTSSK AEPPQCTSLAWSADGQTLFAGYTDNLVRVWQVTIGTR TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_006089
RefSeq Size:	1125
RefSeq ORF:	951
Synonyms:	Gnb2-rs1; GNB2L1; H12.3; HLC-7; PIG21
Locus ID:	10399



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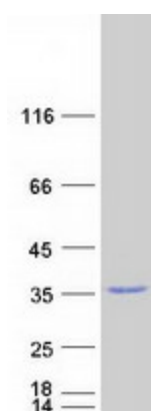
UniProt ID: [P63244](#), [E9KL35](#)

Cytogenetics: 5q35.3

Summary: Scaffolding protein involved in the recruitment, assembly and/or regulation of a variety of signaling molecules. Interacts with a wide variety of proteins and plays a role in many cellular processes. Component of the 40S ribosomal subunit involved in translational repression (PubMed:23636399). Involved in the initiation of the ribosome quality control (RQC), a pathway that takes place when a ribosome has stalled during translation, by promoting ubiquitination of a subset of 40S ribosomal subunits (PubMed:28132843). Binds to and stabilizes activated protein kinase C (PKC), increasing PKC-mediated phosphorylation. May recruit activated PKC to the ribosome, leading to phosphorylation of EIF6. Inhibits the activity of SRC kinases including SRC, LCK and YES1. Inhibits cell growth by prolonging the G0/G1 phase of the cell cycle. Enhances phosphorylation of BMAL1 by PRKCA and inhibits transcriptional activity of the BMAL1-CLOCK heterodimer. Facilitates ligand-independent nuclear translocation of AR following PKC activation, represses AR transactivation activity and is required for phosphorylation of AR by SRC. Modulates IGF1R-dependent integrin signaling and promotes cell spreading and contact with the extracellular matrix. Involved in PKC-dependent translocation of ADAM12 to the cell membrane. Promotes the ubiquitination and proteasome-mediated degradation of proteins such as CLEC1B and HIF1A. Required for VANGL2 membrane localization, inhibits Wnt signaling, and regulates cellular polarization and oriented cell division during gastrulation. Required for PTK2/FAK1 phosphorylation and dephosphorylation. Regulates internalization of the muscarinic receptor CHRM2. Promotes apoptosis by increasing oligomerization of BAX and disrupting the interaction of BAX with the anti-apoptotic factor BCL2L. Inhibits TRPM6 channel activity. Regulates cell surface expression of some GPCRs such as TBXA2R. Plays a role in regulation of FLT1-mediated cell migration. Involved in the transport of ABCB4 from the Golgi to the apical bile canalicular membrane (PubMed:19674157). Promotes migration of breast carcinoma cells by binding to and activating RHOA (PubMed:20499158).[UniProtKB/Swiss-Prot Function]

Protein Families: Druggable Genome

Product images:



Coomassie blue staining of purified RACK1 protein (Cat# [TP305092]). The protein was produced from HEK293T cells transfected with RACK1 cDNA clone (Cat# [RC205092]) using MegaTran 2.0 (Cat# [TT210002]).