

Product datasheet for PH304296

KLHL22 (NM_032775) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	KLHL22 MS Standard C13 and N15-labeled recombinant protein (NP_116164)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204296
Predicted MW:	71.7 kDa
Protein Sequence:	>RC204296 protein sequence Red =Cloning site Green =Tags(s)

MAEEQFTQLCKLPAQPSHPHCVNNTYRSAQHSQALLRGLLALRDSGILFDVVLVVEGRHIEAHRILLAA
 SCDYFRGMFAGGLKEMEQUEEVLIHGVSYNAMCQILHFIYTSELESLSNVQETLVAACQLQIPEIIHFCC
 DFLMSWVDEENILDVYRLAELFDLSRLTEQLDTYILKNFVAFSRDKYRQLPLEKVYSLSSNRLEVSCE
 TEVYEGALLYHYSLEQVQADQISLHEPPKLETVRFPLMEAEVLQRLHDKLDPSPLRDTVASALMYHRNE
 SLQPSLQSPQTELRSDFCVVGFGGIHSTPSTVLSQAKYLNPLLGEWKHFTASLAPRMSNQGI AVLNNF
 VYLIGDNNVQGFRAESRCWRYDPRHNRWFQIQSLQQEHADLSVCVVGRIYIYAVAGRDYHNDLNAVERYD
 PATNSWAYVAPLKREYVAHAGATLEGKMYITCGRRGEDYKETHCYDPSNTWHTLADGPVRRWHGMAT
 LLNKLYVIGGSNNDAGYRRDVHQVACYSCTSGQWSSVCPLPAGHGEPGIAVLNRIYVLGGRSHNRGSRT
 GYVHIYDVEKDCWEEGQLDNSISGLAACVLTLPRLLEPPRGTPDRSQADPDFASEVMSVSDWEEFDN
 SSED

TRTRPLEEQKLISEEDLAANDILDYKDDDDKV

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:	<u>NP_116164</u>
RefSeq Size:	2637


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RefSeq ORF: 1902

Synonyms: KELCHL

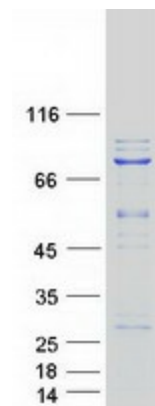
Locus ID: 84861

UniProt ID: [Q53GT1](#)

Cytogenetics: 22q11.21

Summary: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex required for chromosome alignment and localization of PLK1 at kinetochores. The BCR(KLHL22) ubiquitin ligase complex mediates monoubiquitination of PLK1, leading to PLK1 dissociation from phosphoreceptor proteins and subsequent removal from kinetochores, allowing silencing of the spindle assembly checkpoint (SAC) and chromosome segregation. Monoubiquitination of PLK1 does not lead to PLK1 degradation (PubMed:19995937, PubMed:23455478). The BCR(KLHL22) ubiquitin ligase complex is also responsible for the amino acid-stimulated 'Lys-48' polyubiquitination and proteasomal degradation of DEPDC5. Through the degradation of DEPDC5, releases the GATOR1 complex-mediated inhibition of the TORC1 pathway. It is therefore an amino acid-dependent activator within the amino acid-sensing branch of the TORC1 pathway, indirectly regulating different cellular processes including cell growth and autophagy (PubMed:29769719).[UniProtKB/Swiss-Prot Function]

Product images:



Coomassie blue staining of purified KLHL22 protein (Cat# [TP304296]). The protein was produced from HEK293T cells transfected with KLHL22 cDNA clone (Cat# [RC204296]) using MegaTran 2.0 (Cat# [TT210002]).