

Product datasheet for PH307152

OriGene Technologies, Inc.

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Cryptochrome I (CRY1) (NM 004075) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: CRY1 MS Standard C13 and N15-labeled recombinant protein (NP_004066)

Species: Human **HEK293 Expression Host: Expression cDNA Clone**

or AA Sequence:

RC207152

Predicted MW: 66.4 kDa

>RC207152 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MGVNAVHWFRKGLRLHDNPALKECIQGADTIRCVYILDPWFAGSSNVGINRWRFLLQCLEDLDANLRKLN SRLFVIRGOPADVFPRLFKEWNITKLSIEYDSEPFGKERDAAIKKLATEAGVEVIVRISHTLYDLDKIIE LNGGQPPLTYKRFQTLISKMEPLEIPVETITSEVIEKCTTPLSDDHDEKYGVPSLEELGFDTDGLSSAVW PGGETEALTRLERHLERKAWVANFERPRMNANSLLASPTGLSPYLRFGCLSCRLFYFKLTDLYKKVKKNS SPPLSLYGQLLWREFFYTAATNNPRFDKMEGNPICVQIPWDKNPEALAKWAEGRTGFPWIDAIMTQLRQE GWIHHLARHAVACFLTRGDLWISWEEGMKVFEELLLDADWSINAGSWMWLSCSSFFQQFFHCYCPVGFGR RTDPNGDYIRRYLPVLRGFPAKYIYDPWNAPEGIQKVAKCLIGVNYPKPMVNHAEASRLNIERMKQIYQQ LSRYRGLGLLASVPSNPNGNGGFMGYSAENIPGCSSSGSCSQGSGILHYAHGDSQOTHLLKQGRSSMGTG

LSGGKRPSQEEDTQSIGPKVQRQSTN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 004066

RefSeq Size: 3310 RefSeq ORF: 1758



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Synonyms: DSPD; PHLL1

Locus ID: 1407

UniProt ID: <u>Q16526</u>, <u>A2I2P0</u>

Cytogenetics: 12q23.3

Summary: This gene encodes a flavin adenine dinucleotide-binding protein that is a key component of

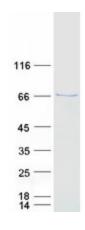
the circadian core oscillator complex, which regulates the circadian clock. This gene is upregulated by CLOCK/ARNTL heterodimers but then represses this upregulation in a feedback loop using PER/CRY heterodimers to interact with CLOCK/ARNTL. Polymorphisms in this gene have been associated with altered sleep patterns. The encoded protein is widely conserved across plants and animals. Loss of the related gene in mouse results in a

shortened circadian cycle in complete darkness. [provided by RefSeq, Jan 2014]

Protein Families: Druggable Genome

Protein Pathways: Circadian rhythm - mammal

Product images:



Coomassie blue staining of purified CRY1 protein (Cat# [TP307152]). The protein was produced from HEK293T cells transfected with CRY1 cDNA clone (Cat# [RC207152]) using MegaTran 2.0 (Cat# [TT210002]).