

Product datasheet for PH304631

IMPACT (NM_018439) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	IMPACT MS Standard C13 and N15-labeled recombinant protein (NP_060909)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204631
Predicted MW:	36.5 kDa
Protein Sequence:	<p>>RC204631 protein sequence</p> <p>Red=Cloning site Green=Tags(s)</p> <p>MAEGDAGSDQRQNEEIEAMAAIYGEEWCVIDDCAKIFCIRISDDIDDPKWTLCQLQVMLPNEYPGTAPPIY QLNAPWLKGQERADLSNSLEEIYIQNIGESILYLWVEKIRDVLIQKSQMTEPGPDVKKKTEEDVECDD LILACQPESSVKALDFDISETRTEVEVEELPPIDHGIPITDRRSTFQAHLAPVVCPCQVKMVL SKLYENK KIASATHNIYAYRIYCEDKQTFLLQDCEDDGETAAGGRLLHLMELNVKNVMVVSRWYGGILLGPDRFKH INNCARNILVEKNYTN SPEESSKALGKNKKVRKDKKRNEH</p> <p>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
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_060909</u>
RefSeq Size:	3764
RefSeq ORF:	960
Synonyms:	RWDD5
Locus ID:	55364

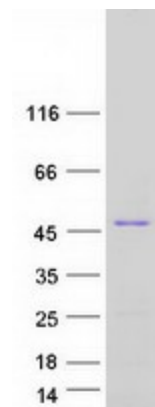

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UniProt ID: [Q9P2X3](#), [A0A024RC24](#)

Cytogenetics: 18q11.2

Summary: Translational regulator that ensures constant high levels of translation upon a variety of stress conditions, such as amino acid starvation, UV-C irradiation, proteasome inhibitor treatment and glucose deprivation. Plays a role as a negative regulator of the EIF2AK4/GCN2 kinase activity; impairs GCN1-mediated EIF2AK4/GCN2 activation, and hence EIF2AK4/GCN2-mediated eIF-2-alpha phosphorylation and subsequent down-regulation of protein synthesis. May be required to regulate translation in specific neuronal cells under amino acid starvation conditions by preventing GCN2 activation and therefore ATF4 synthesis. Through its inhibitory action on EIF2AK4/GCN2, plays a role in differentiation of neuronal cells by stimulating neurite outgrowth.[UniProtKB/Swiss-Prot Function]

Product images:



Coomassie blue staining of purified IMPACT protein (Cat# [TP304631]). The protein was produced from HEK293T cells transfected with IMPACT cDNA clone (Cat# [RC204631]) using MegaTran 2.0 (Cat# [TT210002]).