

Product datasheet for PH301725

HYPE (FICD) (NM_007076) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	FICD MS Standard C13 and N15-labeled recombinant protein (NP_009007)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC201725
Predicted MW:	51.8 kDa
Protein Sequence:	>RC201725 protein sequence Red=Cloning site Green=Tags(s)

MMLIPMASVMVAVTEPKWVSVWSRFLWVTLTSMVLGSLALLLPLGAVEEQCLAVLKGLYLLRSPDRAQH
AATKCTSPSTELITSRGATLLVAKTKASPAGKLEARAALNQALEMKRQGKREKAQKLFMHALKMDPDFV
DALTEFGIFSEEDKDIIQADYLYTRALTI SPYHEKALVNRDRTLPLVEEIDQRYFSIIDSKVKKVMSIPK
GNSALRRVMEETYHHIYHTVAIEGNTLTLSEIRHILETRYAVPGKSLEEQNEVIGMHAAMKYINTTLVS
RIGSVTISDVLEIHRRLVGYVDPVEAGRFRTTQVLVGHHPHPQDVEKQMQEFVQWLNSEEAMNLHPVE
FAALAHYKLVYIHPFIDGNGRTSRLLMNLILMQAGYPPITIRKEQRSYYHVLEAANEGDVRPFIRFIAK
CTETTLDTLLFATTEYSVALPEAQPNSHSGFKETLPVKP

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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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_009007</u>
RefSeq Size:	1651
RefSeq ORF:	1374
Synonyms:	HIP13; HYPE; UNQ3041



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Locus ID: 11153

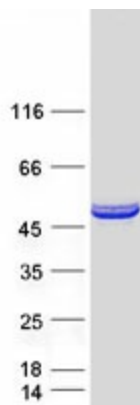
UniProt ID: [Q9BVA6](#), [A0A024RBM8](#)

Cytogenetics: 12q23.3

Summary: Protein that can both mediate the addition of adenosine 5'-monophosphate (AMP) to specific residues of target proteins (AMPylation), and the removal of the same modification from target proteins (de-AMPylation), depending on the context (By similarity). The side chain of Glu-231 determines which of the two opposing activities (AMPylase or de-AMPylase) will take place (By similarity). Acts as a key regulator of the ERN1/IRE1-mediated unfolded protein response (UPR) by mediating AMPylation or de-AMPylation of HSPA5/BiP (PubMed:25601083). In unstressed cells, acts as an adenylyltransferase by mediating AMPylation of HSPA5/BiP at 'Thr-518', thereby inactivating it (By similarity). In response to endoplasmic reticulum stress, acts as a phosphodiesterase by mediating removal of ATP (de-AMPylation) from HSPA5/BiP at 'Thr-518', leading to restore HSPA5/BiP activity (By similarity). Although it is able to AMPylate RhoA, Rac and Cdc42 Rho GTPases in vitro, Rho GTPases do not constitute physiological substrates (PubMed:19362538, PubMed:25601083).[UniProtKB/Swiss-Prot Function]

Protein Families: Transmembrane

Product images:



Coomassie blue staining of purified FICD protein (Cat# [TP301725]). The protein was produced from HEK293T cells transfected with FICD cDNA clone (Cat# [RC201725]) using MegaTran 2.0 (Cat# [TT210002]).