

## **Product datasheet for TP301725M**

## OriGene Technologies, Inc.

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## HYPE (FICD) (NM\_007076) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human FIC domain containing (FICD), 100 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC201725 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MMLIPMASVMAVTEPKWVSVWSRFLWVTLLSMVLGSLLALLLPLGAVEEQCLAVLKGLYLLRSKPDRAQH AATKCTSPSTELSITSRGATLLVAKTKASPAGKLEARAALNQALEMKRQGKREKAQKLFMHALKMDPDFV DALTEFGIFSEEDKDIIQADYLYTRALTISPYHEKALVNRDRTLPLVEEIDQRYFSIIDSKVKKVMSIPK GNSALRRVMEETYYHHIYHTVAIEGNTLTLSEIRHILETRYAVPGKSLEEQNEVIGMHAAMKYINTTLVS RIGSVTISDVLEIHRRVLGYVDPVEAGRFRTTQVLVGHHIPPHPQDVEKQMQEFVQWLNSEEAMNLHPVE FAALAHYKLVYIHPFIDGNGRTSRLLMNLILMQAGYPPITIRKEQRSDYYHVLEAANEGDVRPFIRFIAK

CTETTLDTLLFATTEYSVALPEAQPNHSGFKETLPVKP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 51.6 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 009007





**Locus ID:** 11153

UniProt ID: Q9BVA6, A0A024RBM8

RefSeq Size: 1651 Cytogenetics: 12q23.3 RefSeq ORF: 1374

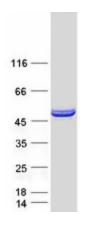
Synonyms: HIP13; HYPE; UNQ3041

**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]).