

## Product datasheet for RC201725L4V

## OriGene Technologies, Inc.

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## HYPE (FICD) (NM\_007076) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** HYPE (FICD) (NM\_007076) Human Tagged ORF Clone Lentiviral Particle

Symbol: HYPE

Synonyms: HIP13; HYPE; UNQ3041

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_007076 **ORF Size:** 1374 bp

**ORF Nucleotide** 

OTI Disclaimer:

137 156

Sequence:

The ORF insert of this clone is exactly the same as(RC201725).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 007076.2

 RefSeq Size:
 1651 bp

 RefSeq ORF:
 1377 bp

 Locus ID:
 11153

 UniProt ID:
 Q9BVA6

 Cytogenetics:
 12q23.3

**Protein Families:** Transmembrane

MW: 51.8 kDa







## **Gene 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]