

Product datasheet for SC125628

HYPE (FICD) (NM_007076) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: HYPE (FICD) (NM_007076) Human Untagged Clone
Tag: Tag Free
Symbol: HYPE
Synonyms: HIP13; HYPE; UNQ3041
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_007076 edited
GCTGGGAGCGCGGGAAGCGGTTGGGGTTCTGACAGCTGCGCGCATCCTGCTCTCTCT
CAGCCGCTGTGGACATGCGCAAAGGGCCCTCCTGAGTCCAGATGATGCTCATACCAA
TGGCTTACAGTGATGGCGGTGACTGAACCGAAATGGGTCTCGGTCTGGAGCCGCTTCTCT
GGGTGACGCTGCTGAGCATGGTGTGGGTCCCTGCTGGCCCTGCTGCTGCCGCTGGGGG
CTGTGGAGGAGCAGTGTGGTGTGCTCAAAGGCCTCTACCTGCTCAGGAGCAAACCGG
ACAGGGCGCAGCATGCCGCCACCAAGTGCACCAGCCCGTCCACGGAGCTCAGCATCACCT
CCAGGGGCGCAGCTGCTGGTGGCCAAGACCAAGGCCTCTCCAGCGGTAAGTTGGAAG
CCAGAGCTGCCCTGAACAGGCCCTGGAGATGAAGCGCCAGGGCAAGCGGAAAAAGCCC
AAAAGCTTTTCATGCACGCCCTCAAGATGGACCCGGACTTCGTGGACGCGCTCACCGAGT
TTGGCATCTTCTCGAAGAAGACAAGGACATCATCCAGGCGGACTACTTGTACACCAGAG
CATTGACCATCTACCCTACCATGAGAAAGCACTGGTCAACCCGATCGGACACTGCCTC
TTGTGGAAGAGATCGACCAGAGTATTTCAAGCATCATCGACAGCAAAGTGAAGAAGTCA
TGTCCATCCCCAAGGGAACTCAGCTCTGCGCAGGGTCATGGAGGAGACCTACTACCATC
ACATCTACCACACAGTGGCCATCGAGGGCAACACCCTCACCTCTCGGAAATCAGGCACA
TCCTGGAGACCCGCTACGCCGTGCCCGGGAAGAGCCTGGAGGAGCAGAACGAGGTATAG
GCATGCATGCAGCCATGAAGTACATCAACACGACTCTGGTTTCGCGCATCGGCTCCGTCA
CCATCAGCGACGTGCTGGAGATCCACAGGCGGGTGTGGGCTACGTGGACCCCGTGAAG
CCGGCAGGTTTCGGACAACACAGGTCCTGGTCCGACACCACATCCCTCCCATCCGCAGG
ATGTGGAAAAGCAGATGCAGGAGTTTGTACAGTGGCTCAACTCCGAGGAAGCCATGAACC
TGCACCCAGTGGAGTTTGCAGCCTTAGCCATTATAAACTCGTTTACATCCACCCTTTCA
TTGATGGCAACGGGAGGACCTCCCGTCTGCTCATGAACCTCATCCTCATGCAGGCGGGCT
ACCCGCCATCACCATCCGCAAGGAGCAGCGGTCCGACTACTACCAGTGTGGAAGCTG
CCAACGAGGGCGACGTGAGGCCTTTCATTCGTTTCATCGCCAAGTGTACTGAGACCACC
TGGACACCCTGCTTTTTGCCACAAGTACTCGGTGGCACTGCCAGAAGCCCAACCCA
ACCACTCTGGGTTCAAGGAGACGCTTCTGTGAAGCCCTAACCTAGAAATCCTCAGTGA
CAAAGGCTGTCTGAGGTAGGAAAAAAAAAAAAAAAAAAAAA



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_007076 unedited GGATAGGATTTGTATACGACTTACTATAGGCGGACCGCGAATCAAATCTGGTACCGGTCC GGAATTCGCCGGATATCGTCGACCCACGCGTCCGGCTGGGAGCGCGGGGAAGCGGTTGG GGTTCTGACAGCTGCGCGCATCCTGCTCTCTCAGCCGCTGTGGACATGCGCAAAGG GCCCTCTCTGAGTCCAGATGATGCTCATACCAATGGCTTCAGTATGGCGGTGACTGAA CGAAATGGGTCTCGGTCTGGAGCCGCTTCCTCTGGGTGACGCTGCTGAGCATGGTGCTG GGTCCCCTGCTGGCCCTGCTGCTGCCGCTGGGGCTGTGGAGGAGCAGTGTGGCTGTG CTCAAAGGCTCTACCTGCTCAGGAGCAAACCGGACAGGGCGCAGCATGCCGCCACCAAG TGACCAGCCCGTCCACGGAGCTCAGCATCACCTCCAGGGGCGCGACGCTGCTGGTGCC AAGACCAAGGCTCTCCAGCGGGTAAGTTGGAAGCCAGAGCTGCCCTGAACCAGGCCCTG GAGATGAAGCGCCAGGGCAAGCGGGAAAAAGCCAAAAGCTTTCATGCACGCCCTCAAG ATGGACCCGGACTTCGTGGACGCGCTCACCGAGTTTGGCATCTTCTCGGGAAGAGAACAG GACATCATCCAGGCGGACTACTGTACACCAGAGCATTGACCATCTCACCTACCATGAG AAAGACTGGTCAACCCGCGATCGGACACTGGCTCTTGTGGGAGAAATCGACCAGAGGTA TTTCAGCATCATCGACAGCAAAGTGAAGAAGGTCATGTTCCATCCCCAAGGGGAACCTCAC CTTTGCCAGGGCATTGGAGGAAACCTACTACCATGACATGCTCCACAACGTGGGCCAT CGAGGGGCACACCCTCCCTCT
Restriction Sites:	Please inquire
ACCN:	NM_007076
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_007076.2</u> , <u>NP_009007.2</u>
RefSeq Size:	1651 bp
RefSeq ORF:	1377 bp
Locus ID:	11153
UniProt ID:	<u>Q9BVA6</u>
Cytogenetics:	12q23.3
Protein Families:	Transmembrane

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]