

### HYPE Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54599

#### Specification

# HYPE Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, ICC, E <u>O9BVA6</u> Rat, Pig, Dog Rabbit Polyclonal 51778

### **HYPE Polyclonal Antibody - Additional Information**

Gene ID 11153

**Other Names** 

Protein adenylyltransferase FICD, 2.7.7.n1, AMPylator FICD, De-AMPylase FICD, FIC domain-containing protein, Huntingtin yeast partner E, Huntingtin-interacting protein 13, HIP-13, Huntingtin-interacting protein E, FICD (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=18416" target="\_blank">HGNC:18416</a>)

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

#### **HYPE Polyclonal Antibody - Protein Information**

Name FICD (HGNC:18416)

#### Function

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 (PubMed:<a href="http://www.uniprot.org/citations/36136088" target="\_blank">36136088</a>). Acts as a key regulator of the ERN1/IRE1-mediated unfolded protein response (UPR) by mediating AMPylation or de-AMPylation of HSPA5/BiP (PubMed:<a

href="http://www.uniprot.org/citations/25601083" target="\_blank">25601083</a>, PubMed:<a href="http://www.uniprot.org/citations/36136088" target="\_blank">36136088</a>). 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:<a href="http://www.uniprot.org/citations/19362538" target="\_blank">19362538</a>, PubMed:<a href="http://www.uniprot.org/citations/25601083" target="\_blank">25601083</a>).

**Cellular Location** Endoplasmic reticulum membrane; Single-pass type II membrane protein

Tissue Location Ubiquitous..

## **HYPE Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **HYPE Polyclonal Antibody Images**