

HYPE Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54599

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9BVA6
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51778

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 (HGNC:18416)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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.

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: 36136088). 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 , PubMed: 36136088). 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).

Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein
Tissue Location	Ubiquitous..

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