

HYPE / FICD Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3516a

Specification

HYPE / FICD Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Predicted Host Clonality Concentration Isotype Calculated MW E <u>O9BVA6</u> <u>NP_009007.2</u>, <u>11153</u>, <u>231630 (mouse)</u>, <u>288741</u> (<u>rat)</u> Human, Mouse, Rat, Pig, Dog Goat Polyclonal 0.5 mg/ml IgG 51778

HYPE / FICD Antibody (internal region) - Additional Information

Gene ID 11153

Other Names

Adenosine monophosphate-protein transferase FICD, 2.7.7.n1, AMPylator FICD, FIC domain-containing protein, Huntingtin yeast partner E, Huntingtin-interacting protein 13, HIP-13, Huntingtin-interacting protein E, FICD, HIP13, HYPE

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HYPE / FICD Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

HYPE / FICD Antibody (internal region) - Protein Information

Name FICD (<u>HGNC:18416</u>)

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..

HYPE / FICD Antibody (internal region) - 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 / FICD Antibody (internal region) - Images

HYPE / FICD Antibody (internal region) - References

The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Clark HF, Gurney AL, Abaya E, Baker K, Baldwin D, Brush J, Chen J, Chow B, Chui C, Crowley C, Currell B, Deuel B, Dowd P, Eaton D, Foster J, Grimaldi C, Gu Q, Hass PE, Heldens S, Huang A, Kim HS, Klimowski L, Jin Y, Johnson S, Lee J, Lewis L, Liao D, Mark Genome research 2003 Oct 13 (10): 2265-70. PMID: 12975309