

HIP2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2114c

Product Information

Application Primary Accession	WB, IF, IHC-P, E <u>P61086</u>
Other Accession	<u></u> <u>P61087, P61085, NP_005330</u>
Reactivity	Human, Mouse
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22407
Antigen Region	109-139

Additional Information

Gene ID	3093
Other Names	Ubiquitin-conjugating enzyme E2 K, Huntingtin-interacting protein 2, HIP-2, Ubiquitin carrier protein, Ubiquitin-conjugating enzyme E2-25 kDa, Ubiquitin-conjugating enzyme E2(25K), Ubiquitin-conjugating enzyme E2-25K, Ubiquitin-protein ligase, UBE2K, HIP2, LIG
Target/Specificity	This HIP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 109-139 amino acids from the Central region of human HIP2.
Dilution	WB~~1:1000 IF~~1:10~50 IHC-P~~1:100 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HIP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name

Synonyms	HIP2, LIG
Function	Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro, in the presence or in the absence of BRCA1-BARD1 E3 ubiquitin-protein ligase complex, catalyzes the synthesis of 'Lys-48'-linked polyubiquitin chains. Does not transfer ubiquitin directly to but elongates monoubiquitinated substrate protein. Mediates the selective degradation of short-lived and abnormal proteins, such as the endoplasmic reticulum-associated degradation (ERAD) of misfolded lumenal proteins. Ubiquitinates huntingtin. May mediate foam cell formation by the suppression of apoptosis of lipid-bearing macrophages through ubiquitination and subsequence degradation of p53/TP53. Proposed to be involved in ubiquitination and proteolytic processing of NF-kappa-B; in vitro supports ubiquitination of NFKB1. In case of infection by cytomegaloviruses may be involved in the US11-dependent degradation of MHC class I heavy chains following their export from the ER to the cytosol. In case of viral infections may be involved in the HPV E7 protein-dependent degradation of RB1.
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:P61085}.
Tissue Location	Expressed in all tissues tested, including spleen, thymus, prostate, testis, ovary, small intestine, colon, peripheral blood leukocytes, T-lymphocytes, monocytes, granulocytes and bone marrow mononuclear cells. Highly expressed in brain, with highest levels found in cortex and striatum and at lower levels in cerebellum and brainstem.

Background

HIP2 belongs to the ubiquitin-conjugating enzyme family. It binds selectively to a large region at the N terminus of huntingtin. This interaction is not influenced by the length of the huntingtin polyglutamine tract. This protein has been implicated in the degradation of huntingtin and suppression of apoptosis.

References

Furukawa, Y., et al., Electrophoresis 21(2):338-346 (2000). Kikuchi, J., et al., Arterioscler. Thromb. Vasc. Biol. 20(1):128-134 (2000). Petersen, A., et al., Exp. Neurol. 157(1):1-18 (1999). Kalchman, M.A., et al., J. Biol. Chem. 271(32):19385-19394 (1996).

Images



Immunohistochemical analysis of paraffin-embedded H. small intestine section using HIP2 Antibody (Center)(Cat#AP2114c). AP2114c was diluted at 1:100 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Fluorescent image of Hela cell stained with HIP2 Antibody



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(Center)(Cat#AP2114c/SH030911H).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with HIP2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). HIP2 immunoreactivity is localized to Cytoplasm significantly.

HIP2 Antibody (D124) (Cat. #AP2114c) western blot analysis in 293,mouse C2C12 cell line lysates (35ug/lane).This demonstrates the HIP2 antibody detected the HIP2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.