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SYVN1 (HRD1) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2184b

Specification

SYVN1 (HRD1) Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q86TM6
Other Accession	Q5XHH7, Q6NRL6, Q9DBY1, Q8N6E8
Reactivity	**Human**
Predicted	**Mouse, Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**58-88**

SYVN1 (HRD1) Antibody (N-term) - Additional Information

Gene ID 84447

Other Names
E3 ubiquitin-protein ligase synoviolin, 632-, Synovial apoptosis inhibitor 1, SYVN1, HRD1, KIAA1810

Target/Specificity
This SYVN1 (HRD1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-88 amino acids from the N-terminal region of human SYVN1 (HRD1).

Dilution
WB~~1:1000

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
SYVN1 (HRD1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SYVN1 (HRD1) Antibody (N-term) - Protein Information

Name SYVN1

Synonyms HRD1, KIAA1810

Function E3 ubiquitin-protein ligase which accepts ubiquitin specifically from endoplasmic reticulum-associated UBC7 E2 ligase and transfers it to substrates, promoting their degradation (PubMed:12459480, PubMed:12646171, PubMed:12975321, PubMed:14593114, PubMed:16289116, PubMed:16847254, PubMed:17059562, PubMed:17141218, PubMed:17170702, PubMed:22607976, PubMed:26471130, PubMed:28827405). Component of the endoplasmic reticulum quality control (ERQC) system also called ER-associated degradation (ERAD) involved in ubiquitin- dependent degradation of misfolded endoplasmic reticulum proteins (PubMed:12459480, PubMed:12646171, PubMed:12975321, PubMed:14593114, PubMed:16289116, PubMed:16847254, PubMed:17059562, PubMed:17141218, PubMed:17170702, PubMed:22607976, PubMed:26471130, PubMed:28842558). Also promotes the degradation of normal but naturally short-lived proteins such as SGK. Protects cells from ER stress-induced apoptosis. Protects neurons from apoptosis induced by polyglutamine-expanded huntingtin (HTT) or unfolded GPR37 by promoting their degradation (PubMed:17141218). Sequesters p53/TP53 in the cytoplasm and promotes its degradation, thereby negatively regulating its biological function in transcription, cell cycle regulation and apoptosis (PubMed:17170702). Mediates the ubiquitination and subsequent degradation of cytoplasmic NFE2L1 (By similarity). During the early stage of B cell development, required for degradation of the pre-B cell receptor (pre-BCR) complex, hence supporting further differentiation into mature B cells (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location
Ubiquitously expressed, with highest levels in liver and kidney (at protein level). Up-regulated in synovial tissues from patients with rheumatoid arthritis (at protein level)

SYVN1 (HRD1) Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SYVN1 (HRD1) Antibody (N-term) - Images

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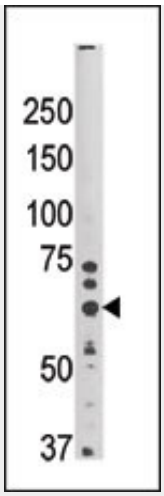

Western blot analysis of anti-HRD1 Pab (Cat. #AP2184b) in mouse brain tissue lysate (35ug/lane). HRD1(arrow) was detected using the purified Pab.

SYVN1 (HRD1) Antibody (N-term) - Background

HRD1 is a ubiquitin ligase whose expression is induced by the unfolded protein response (UPR) following endoplasmic reticulum stress. Expression of HRD1 protects cells from apoptosis by inducing degradation of abnormally processed proteins that accumulate in the endoplasmic reticulum. HRD1 is expressed in many tissues, strongly expressed in brain, pancreas, liver, kidney and skeletal muscle. Synoviolin/Hrd1 (expressed in rheumatoid synovium) is reported to be a novel causative factor for arthropathy by triggering synovial cell outgrowth through its antiapoptotic effects. HRD1 contains one ring-type zinc finger.

SYVN1 (HRD1) Antibody (N-term) - References

Kikkert, M., et al., J. Biol. Chem. 279(5):3525-3534 (2004). Amano, T., et al., Genes Dev. 17(19):2436-2449 (2003). Nadav, E., et al., Biochem. Biophys. Res. Commun. 303(1):91-97 (2003). Kaneko, M., et al., FEBS Lett. 532 (1-2), 147-152 (2002) (): ().

SYVN1 (HRD1) Antibody (N-term) - Citations

- Activating transcription factor 6 limits intracellular accumulation of mutant Î±(1)-antitrypsin Z and mitochondrial damage in hepatoma cells.
- Dual role of ancient ubiquitous protein 1 (AUP1) in lipid droplet accumulation and endoplasmic reticulum (ER) protein quality control.
- Cutting Edge: Selective role of ubiquitin in MHC class I antigen presentation.