

**HRD1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2184e****Specification**

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

Application	<b>WB,E</b>
Primary Accession	<a href="#">Q86TM6</a>
Other Accession	<a href="#">Q5XHH7</a> , <a href="#">Q6NRL6</a> , <a href="#">Q9DBY1</a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse, Xenopus</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>106-138</b>

**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 HRD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 106-138 amino acids from the N-terminal region of human 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**

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

**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**

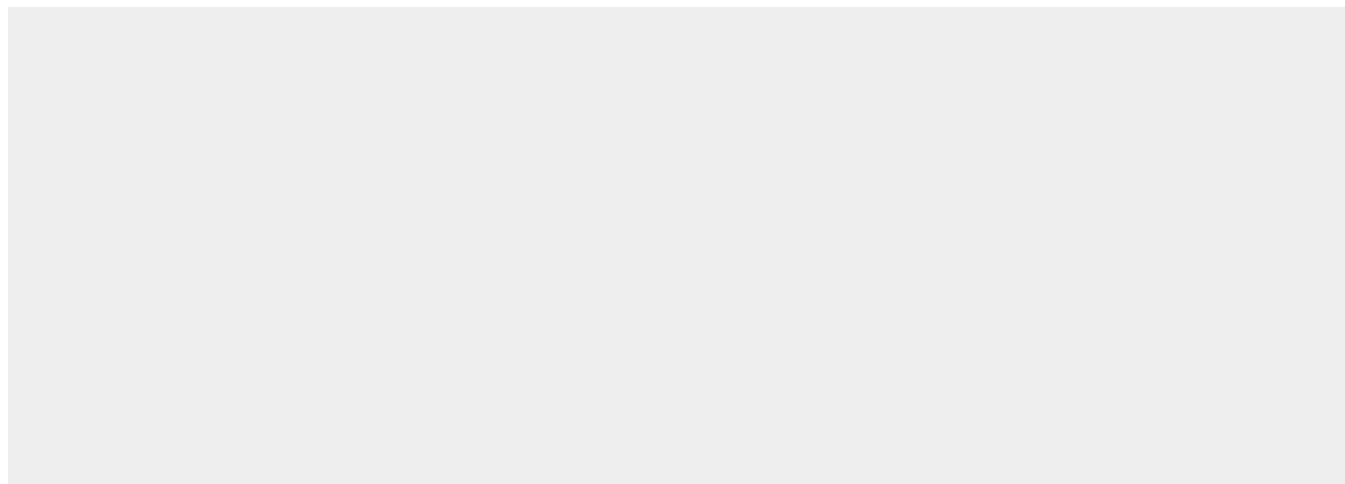
Ubiquitously expressed, with highest levels in liver and kidney (at protein level). Up-regulated in synovial tissues from patients with rheumatoid arthritis (at protein level)

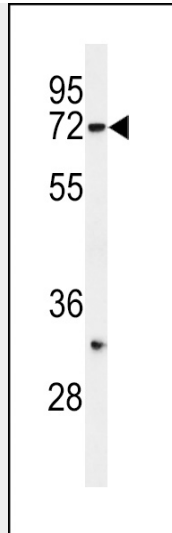
#### **HRD1 Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **HRD1 Antibody (N-term) - Images**





Western blot analysis of HRD1 Antibody (N-term) (Cat. #AP2184e) in SK-BR-3 cell line lysates (35ug/lane). HRD1 (arrow) was detected using the purified Pab.

#### **HRD1 Antibody (N-term) - Background**

HRD1 encodes a protein involved in endoplasmic reticulum (ER)-associated degradation. The encoded protein removes unfolded proteins, accumulated during ER stress, by retrograde transport to the cytosol from the ER. This protein also uses the ubiquitin-proteasome system for additional degradation of unfolded proteins. This gene and the mitochondrial ribosomal protein L49 gene use in their respective 3' UTRs some of the same genomic sequence.

#### **HRD1 Antibody (N-term) - References**

Bernardi, K.M., et al. Mol. Biol. Cell 21(1):140-151(2010) Ballar, P., et al. Int. J. Biochem. Cell Biol. 42(1):167-173(2010) Shmueli, A., et al. Biochem. Biophys. Res. Commun. 390(3):758-762(2009)

#### **HRD1 Antibody (N-term) - Citations**

- [Pharmacological activation of ATF6 remodels the proteostasis network to rescue pathogenic GABA receptors](#)
- [Anti-Warburg effect by targeting HRD1-PFKP pathway may inhibit breast cancer progression](#)
- [Proteostasis Regulators Restore Function of Epilepsy-Associated GABA Receptors](#)
- [Grp94 Delivers  \$\gamma\$ -aminobutyric Acid Type A \(GABAA\) Receptors to Hrd1-Mediated Endoplasmic Reticulum-Associated Degradation.](#)
- [TMEM129 is a Derlin-1 associated ERAD E3 ligase essential for virus-induced degradation of MHC-I.](#)
- [Enhanced endoplasmic reticulum entry of tumor antigen is crucial for cross-presentation induced by dendritic cell-targeted vaccination.](#)
- [MHC class I molecules are preferentially ubiquitinated on endoplasmic reticulum luminal residues during HRD1 ubiquitin E3 ligase-mediated dislocation.](#)