

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

**Specification**

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

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

**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**

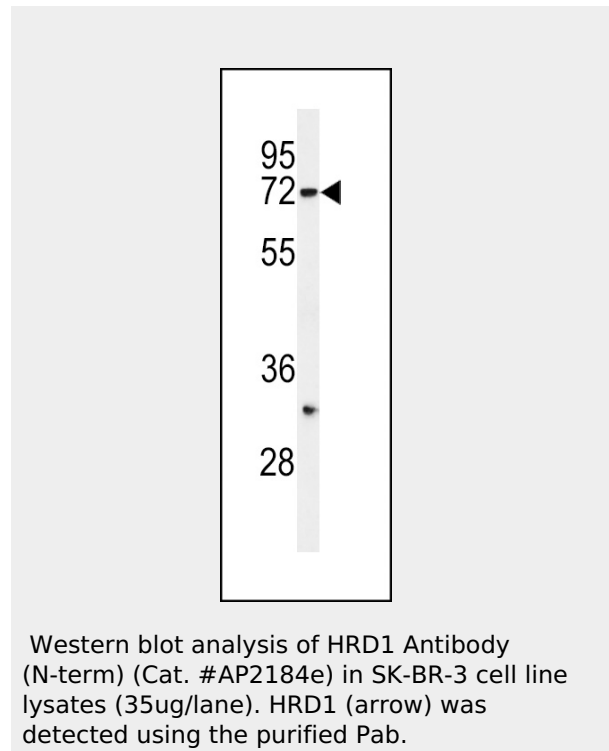
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**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



**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)

## Synonyms HRD1, KIAA1810

### Function

Acts as an E3 ubiquitin-protein ligase which accepts ubiquitin specifically from endoplasmic reticulum-associated UBC7 E2 ligase and transfers it to substrates, promoting their degradation (PubMed:<a href="http://www.uniprot.org/citations/12459480" target="\_blank">12459480</a>, PubMed:<a href="http://www.uniprot.org/citations/12646171" target="\_blank">12646171</a>, PubMed:<a href="http://www.uniprot.org/citations/12975321" target="\_blank">12975321</a>, PubMed:<a href="http://www.uniprot.org/citations/14593114" target="\_blank">14593114</a>, PubMed:<a href="http://www.uniprot.org/citations/16289116" target="\_blank">16289116</a>, PubMed:<a href="http://www.uniprot.org/citations/16847254" target="\_blank">16847254</a>, PubMed:<a href="http://www.uniprot.org/citations/17059562" target="\_blank">17059562</a>, PubMed:<a href="http://www.uniprot.org/citations/17141218" target="\_blank">17141218</a>, PubMed:<a href="http://www.uniprot.org/citations/17170702" target="\_blank">17170702</a>, PubMed:<a href="http://www.uniprot.org/citations/22607976" target="\_blank">22607976</a>, PubMed:<a href="http://www.uniprot.org/citations/26471130" target="\_blank">26471130</a>).

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:<a href="http://www.uniprot.org/citations/12459480" target="\_blank">12459480</a>, PubMed:<a href="http://www.uniprot.org/citations/12646171" target="\_blank">12646171</a>, PubMed:<a href="http://www.uniprot.org/citations/12975321" target="\_blank">12975321</a>, PubMed:<a href="http://www.uniprot.org/citations/14593114" target="\_blank">14593114</a>, PubMed:<a href="http://www.uniprot.org/citations/16289116" target="\_blank">16289116</a>, PubMed:<a href="http://www.uniprot.org/citations/16847254" target="\_blank">16847254</a>, PubMed:<a href="http://www.uniprot.org/citations/17059562" target="\_blank">17059562</a>, PubMed:<a href="http://www.uniprot.org/citations/17141218" target="\_blank">17141218</a>, PubMed:<a href="http://www.uniprot.org/citations/17170702" target="\_blank">17170702</a>, PubMed:<a href="http://www.uniprot.org/citations/22607976" target="\_blank">22607976</a>, PubMed:<a href="http://www.uniprot.org/citations/26471130" target="\_blank">26471130</a>). 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:<a href="http://www.uniprot.org/citations/17141218" target="\_blank">17141218</a>). Sequesters p53/TP53 in the cytoplasm and promotes its degradation, thereby negatively regulating its biological function in transcription, cell cycle regulation and apoptosis (PubMed:<a href="http://www.uniprot.org/citations/17170702" target="\_blank">17170702</a>). Mediates the ubiquitination and subsequent degradation of cytoplasmic NFE2L1 (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) - Citations**

- [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.](#)