

### SYVN1 (HRD1) Antibody (C-term) Blocking peptide Synthetic peptide Catalog # BP2184a

### Specification

# SYVN1 (HRD1) Antibody (C-term) Blocking peptide - Product Information

Primary Accession Other Accession <u>Q86TM6</u> <u>Q8N6E8</u>

## SYVN1 (HRD1) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 84447

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

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a

href=/product/products/AP2184a>AP2184a</a> was selected from the C-term region of human HRD1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SYVN1 (HRD1) Antibody (C-term) Blocking peptide - Protein Information

#### Name SYVN1 {ECO:0000303|PubMed:15489334}

#### 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:<a href="http://www.uniprot.org/citations/12459480" target="\_blank">12459480</a>, 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/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/1689116" target="\_blank">16847254</a>, PubMed:<a href="http://www.uniprot.org/citations/16847254" target="\_blank">16847254</a>, PubMed:<a href="http://www.uniprot.org/citations/16847254" target="\_blank">17059562</a>, PubMed:<a href="http://www.uniprot.org/citations/16847254" target="\_blank">17059562</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/27827840" target=" blank">27827840</a>, PubMed: <a href="http://www.uniprot.org/citations/26471130" target=" blank">26471130</a>, PubMed:<a href="http://www.uniprot.org/citations/28827405" target="\_blank">28827405</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>, PubMed:<a href="http://www.uniprot.org/citations/28842558" target=" blank">28842558</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>). Seguesters 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). 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 (C-term) Blocking peptide - Protocols

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

### <u>Blocking Peptides</u>

SYVN1 (HRD1) Antibody (C-term) Blocking peptide - Images

### SYVN1 (HRD1) Antibody (C-term) Blocking peptide - 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. Amano T, et al. reported that Synoviolin/Hrd1 (expressed in rheumatoid synovium) is 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 (C-term) Blocking peptide - References



Kaneko M, FEBS Lett. 2002. 532: 147-152. Amano T, et al. Genes Dev. 2003. 17: 2436-2449.