# Synoviolin (K-17): sc-79122



The Power to Question

# **BACKGROUND**

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). Synoviolin, also known as SYVN1 (synovial apoptosis inhibitor 1) or HRD1, is a 617 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and contains one RING-type zinc finger. Expressed ubiquitously with highest expression in kidney and liver, Synoviolin exists as a homodimer that exhibits E3 ubiquitin-protein ligase activity and is a component of the ER-associated degradation (ERAD) complex, a multi-protein structure that mediates the degradation of misfolded proteins within the ER. Synoviolin is upregulated in patients with rheumatoid arthritis (RA), suggesting a role for Synoviolin in the pathogenesis of RA.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: SYVN1 (human) mapping to 11q13.1; Syvn1 (mouse) mapping to 19 A.

#### **SOURCE**

Synoviolin (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Synoviolin of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79122 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Synoviolin (K-17) is recommended for detection of Synoviolin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Synoviolin (K-17) is also recommended for detection of Synoviolin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Synoviolin siRNA (h): sc-76620, Synoviolin siRNA (m): sc-76621, Synoviolin shRNA Plasmid (h): sc-76620-SH, Synoviolin shRNA Plasmid (m): sc-76621-SH, Synoviolin shRNA (h) Lentiviral Particles: sc-76620-V and Synoviolin shRNA (m) Lentiviral Particles: sc-76621-V.

Molecular Weight of Synoviolin: 85 kDa.

Positive Controls: Ramos cell lysate: sc-2216, Hep G2 cell lysate: sc-2227 or mouse kidney extract: sc-2255.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.



Try **Synoviolin (4H4): sc-293484**, our highly recommended monoclonal alternative to Synoviolin (K-17).

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