

### SHFM1/DSS1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55574

### **Specification**

## SHFM1/DSS1 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Pig, Bovine
Host
Clonality
Calculated MW
P60896
Pig, Bovine
Rabbit
Polyclonal
8278

## SHFM1/DSS1 Polyclonal Antibody - Additional Information

# **Gene ID** 7979

#### **Other Names**

26S proteasome complex subunit SEM1, 26S proteasome complex subunit DSS1, Deleted in split hand/split foot protein 1, Split hand/foot deleted protein 1, Split hand/foot malformation type 1 protein, SEM1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=10845" target="blank">HGNC:10845</a>)

#### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

# SHFM1/DSS1 Polyclonal Antibody - Protein Information

### Name SEM1 (<u>HGNC:10845</u>)

#### **Function**

Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair (PubMed:<a href="http://www.uniprot.org/citations/15117943" target="\_blank">15117943</a></a>). Component of the TREX-2 complex (transcription and export





complex 2), composed of at least ENY2, GANP, PCID2, SEM1, and either centrin CETN2 or CETN3 (PubMed:<a href="http://www.uniprot.org/citations/22307388" target="\_blank">22307388</a>). The TREX-2 complex functions in docking export-competent ribonucleoprotein particles (mRNPs) to the nuclear entrance of the nuclear pore complex (nuclear basket). TREX-2 participates in mRNA export and accurate chromatin positioning in the nucleus by tethering genes to the nuclear periphery. Binds and stabilizes BRCA2 and is thus involved in the control of R-loop-associated DNA damage and thus transcription- associated genomic instability. R-loop accumulation increases in SEM1- depleted cells.

**Cellular Location** Nucleus.

**Tissue Location** 

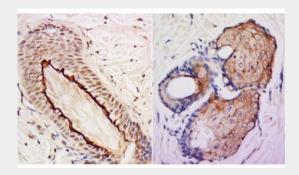
Expressed in limb bud, craniofacial primordia and skin

# SHFM1/DSS1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## SHFM1/DSS1 Polyclonal Antibody - Images



Tissue/cell: human skin tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-DSS1 Polyclonal Antibody, Unconjugated(bs-14432R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining