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DSS1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6264a

Specification

DSS1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	P60896
Other Accession	NP_006295

DSS1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 7979

Other Names
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, SHFM1, DSS1, SHFDG1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6264a was selected from the N-term region of human DSS1 . 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.

DSS1 Antibody (N-term) Blocking Peptide - Protein Information

DSS1 Antibody (N-term) Blocking Peptide - Background

The gene for DSS1 has been localized within the split hand/split foot malformation locus SHFM1 at chromosome 7. DSS1 has been proposed to be a candidate for the autosomal dominant form of the heterogeneous limb developmental disorder split hand/split foot malformation type 1. In addition, it has been shown to directly interact with BRCA2. It also may play a role in the completion of the cell cycle.

DSS1 Antibody (N-term) Blocking Peptide - References

Yang, H., et al., Science 297(5588):1837-1848 (2002).Marston, N.J., et al., Mol. Cell. Biol. 19(7):4633-4642 (1999).Jantti, J., et al., Proc. Natl. Acad. Sci. U.S.A. 96(3):909-914 (1999).Crackower, M.A., et al., Hum. Mol. Genet. 5(5):571-579 (1996).Roberts, S.H., et al., J. Med. Genet. 28(7):479-481 (1991).

Name SEM1 (HGNC:10845)

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:15117943). 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:22307388). 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

DSS1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides