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SHFM1/DSS1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55574

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P60896
Reactivity	Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8278
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DSS1
Epitope Specificity	1-70/70
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DSS1/SEM1 family.
SUBUNIT	Part of the 26S proteasome. Interacts with the C-terminal of BRCA2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SEM1 (SEM1, 26S Proteasome Complex Subunit) is a Protein Coding gene. Diseases associated with SEM1 include Split Foot and Split Hand-Split Foot Malformation. Among its related pathways are RET signaling and Transport of glucose and other sugars, bile salts and organic acids, metal ions and amine compounds.

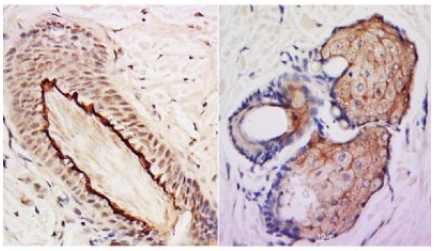
Additional Information

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 (HGNC:10845)
Target/Specificity	Expressed in limb bud, craniofacial primordial and skin.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °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 °C.

Protein Information

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

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℃ for 20 min;
Incubation: Anti-DSS1 Polyclonal Antibody, Unconjugated(AP55574) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining