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SFN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18803c

Product Information

Application	WB, E
Primary Accession	P31947
Other Accession	O70456, Q0VC36, NP_006133.1
Reactivity	Human, Mouse
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	27774
Antigen Region	120-149

Additional Information

Gene ID	2810
Other Names	14-3-3 protein sigma, Epithelial cell marker protein 1, Stratifin, SFN, HME1
Target/Specificity	This SFN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-149 amino acids from the Central region of human SFN.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SFN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SFN
Synonyms	HME1 {ECO:0000303|PubMed:1390337}
Function	Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:15731107,

PubMed:22634725, PubMed:28202711, PubMed:37797010). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:15731107, PubMed:22634725, PubMed:28202711, PubMed:37797010). Binding generally results in the modulation of the activity of the binding partner (PubMed:15731107, PubMed:22634725, PubMed:28202711, PubMed:37797010). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (PubMed:37797010). Also acts as a TP53/p53-regulated inhibitor of G2/M progression (PubMed:9659898). When bound to KRT17, regulates protein synthesis and epithelial cell growth by stimulating Akt/mTOR pathway (By similarity). Acts to maintain desmosome cell junction adhesion in epithelial cells via interacting with and sequestering PKP3 to the cytoplasm, thereby restricting its translocation to existing desmosome structures and therefore maintaining desmosome protein homeostasis (PubMed:24124604). Also acts to facilitate PKP3 exchange at desmosome plaques, thereby maintaining keratinocyte intercellular adhesion (PubMed:29678907). May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53 (PubMed:18382127).

Cellular Location

Cytoplasm. Nucleus {ECO:0000250|UniProtKB:O70456} Secreted. Note=May be secreted by a non- classical secretory pathway.

Tissue Location

Present mainly in tissues enriched in stratified squamous keratinizing epithelium.

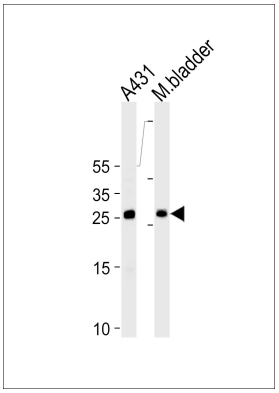
Background

Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathway. Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif. Binding generally results in the modulation of the activity of the binding partner. When bound to KRT17, regulates protein synthesis and epithelial cell growth by stimulating Akt/mTOR pathway (By similarity). p53-regulated inhibitor of G2/M progression.

References

Ren, H.Z., et al. Dig. Dis. Sci. 55(9):2552-2560(2010)
Liu, Y., et al. Brain Res. 1336, 98-102 (2010) :
Pei, H.P., et al. Zhonghua Wei Chang Wai Ke Za Zhi 13(3):213-215(2010)
Syrjanen, S., et al. Am. J. Clin. Pathol. 133(2):232-240(2010)
Zurita, M., et al. BMC Cancer 10, 217 (2010) :

Images



SFN Antibody (Center) (Cat. #AP18803c) western blot analysis in A431 cell line and mouse bladder tissue lysates (35ug/lane).This demonstrates the SFN antibody detected the SFN protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.