

#### SFN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5993b

#### Specification

## SFN Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IF, WB, IHC-P, FC,E <u>P31947</u> <u>NP\_006133.1</u> Human Rabbit Polyclonal Rabbit IgG 222-248

## SFN Antibody (C-term) - 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 222-248 amino acids from the C-terminal region of human SFN.

Dilution IF~~1:10~50 WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## SFN Antibody (C-term) - 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:<u>28202711</u>, PubMed:<u>37797010</u>). Binding generally results in the modulation of the activity of the binding partner (PubMed: 15731107, PubMed: 22634725, PubMed: 28202711, PubMed:<u>37797010</u>). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (PubMed:<u>37797010</u>). 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.

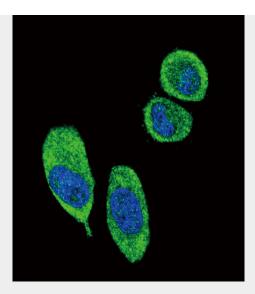
## SFN Antibody (C-term) - Protocols

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

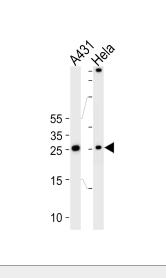
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SFN Antibody (C-term) - Images



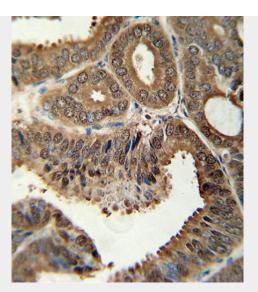


Confocal immunofluorescent analysis of SFN Antibody (C-term)(Cat. #AP5993b) with A549 cell followed by Alexa Fluor[]?488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

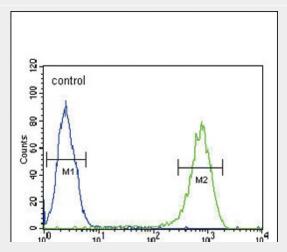


Western blot analysis of lysates from A431, Hela cell line (from left to right), using SFN Antibody (C-term) (Cat. #AP5993b). AP5993b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.





SFN antibody (C-term) (Cat. #AP5993b) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SFN antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SFN Antibody (C-term) (Cat. #AP5993b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.