

# SFN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5213

#### **Product Information**

Application WB Primary Accession P31947

Other Accession <u>070456</u>, <u>00VC36</u>, <u>NP 006133.1</u>

**Reactivity** Mouse, Human

Host Rabbit
Clonality Polyclonal
Calculated MW 27774
Isotype Rabbit IgG
Antigen Source HUMAN

## **Additional Information**

**Gene ID** 2810

Antigen Region 120-149

Other Names SFN; HME1; 14-3-3 protein sigma; Epithelial cell marker protein 1; Stratifin

**Dilution** WB~~1:1000

**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.

**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:<u>22634725</u>, PubMed:<u>28202711</u>, PubMed:<u>37797010</u>). 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:<u>22634725</u>, PubMed:<u>28202711</u>, PubMed:<u>37797010</u>). 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 plagues, 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.

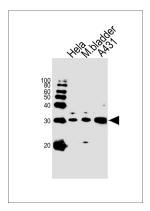
# **Background**

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**



Western blot analysis of lysates from Hela cell line, mouse bladder tissue lysate, A431 cell line (from left to right), using SFN Antibody (Center) (Cat. #AW5213). AW5213 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

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