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SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12744

Specification

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - Product Information

Application	**IHC**
Primary Accession	P31947
Reactivity	**Human, Mouse, Rat, Rabbit, Chicken, Sheep, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**28kDa KDa**

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - Additional Information

Gene ID 2810

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

Target/Specificity
Recognizes 14-3-3 sigma in all mammals. It is a member of the 14-3-3 family which consists of 30 kD proteins that are involved in multiple protein kinase signalling pathways, regulation of cell cycle progression, cytoskeletal structure, transcription ...

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - 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:<a

href="http://www.uniprot.org/citations/22634725" target="_blank">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.

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - Images

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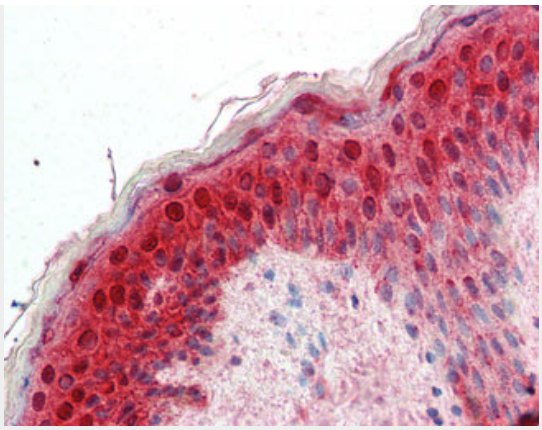

Anti-SFN / 14-3-3 Sigma antibody IHC of human skin.

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - Background

Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways. 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. May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53.

SFN / Stratifin / 14-3-3 Sigma Antibody (N-Terminus) - References

Prasad G.L.,et al.Cell Growth Differ. 3:507-513(1992).
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Hermeking H.,et al.Mol. Cell 1:3-11(1997).
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Gregory S.G.,et al.Nature 441:315-321(2006).