

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3)
Mouse Monoclonal Antibody
Catalog # ALS13321**Specification****SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - Product Information**

Application	WB, IHC
Primary Accession	P31947
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	28kDa KDa

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - Additional Information**Gene ID** 2810**Other Names**

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

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) is for research use only and not for use in diagnostic or therapeutic procedures.

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - 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).

[28202711](http://www.uniprot.org/citations/28202711), PubMed: [37797010](http://www.uniprot.org/citations/37797010)). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (PubMed: [37797010](http://www.uniprot.org/citations/37797010)). Also acts as a TP53/p53-regulated inhibitor of G2/M progression (PubMed: [9659898](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/24124604)). Also acts to facilitate PKP3 exchange at desmosome plaques, thereby maintaining keratinocyte intercellular adhesion (PubMed: [29678907](http://www.uniprot.org/citations/29678907)). May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53 (PubMed: [18382127](http://www.uniprot.org/citations/18382127)).

Cellular Location

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

Tissue Location

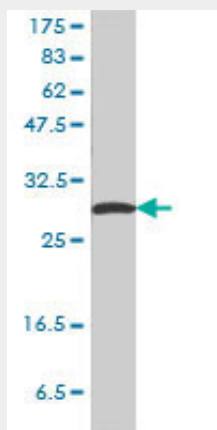
Present mainly in tissues enriched in stratified squamous keratinizing epithelium.

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - Protocols

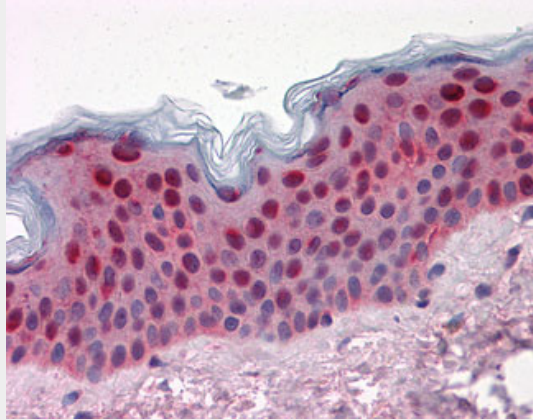
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

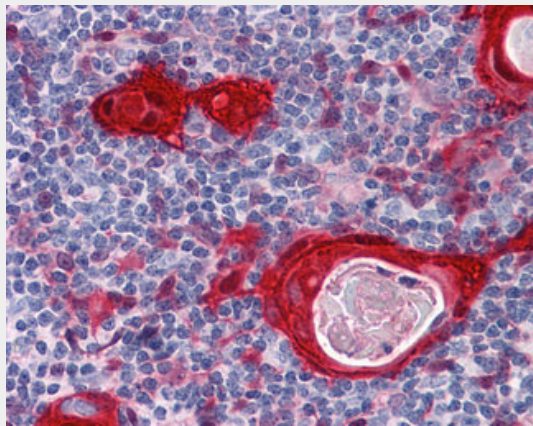
SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - Images



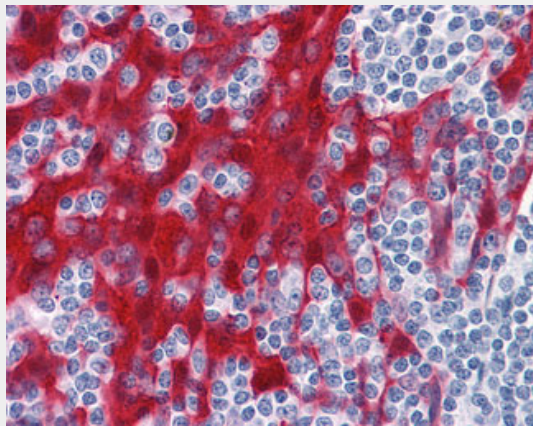
SFN monoclonal antibody, clone 3C3 Western blot of SFN expression in HeLa.



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



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



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

SFN / Stratifin / 14-3-3 Sigma Antibody (clone 3C3) - 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 (clone 3C3) - References

Prasad G.L.,et al.Cell Growth Differ. 3:507-513(1992).
Leffers H.,et al.J. Mol. Biol. 231:982-998(1993).
Hermeking H.,et al.Mol. Cell 1:3-11(1997).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Gregory S.G.,et al.Nature 441:315-321(2006).