

**Goat Anti-14-3-3 sigma / Stratifin Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1001a

**Specification**

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**Goat Anti-14-3-3 sigma / Stratifin Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P31947</a>
Other Accession	<a href="#">NP_006133</a> , <a href="#">2810</a> , <a href="#">55948 (mouse)</a> , <a href="#">313017 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	27774

**Goat Anti-14-3-3 sigma / Stratifin Antibody - Additional Information**

**Gene ID** 2810

**Other Names**

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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-14-3-3 sigma / Stratifin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-14-3-3 sigma / Stratifin Antibody - 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:<a href="http://www.uniprot.org/citations/15731107" target="\_blank">15731107</a>, PubMed:<a href="http://www.uniprot.org/citations/22634725" target="\_blank">22634725</a>, PubMed:<a href="http://www.uniprot.org/citations/28202711" target="\_blank">28202711</a>)

target="\_blank">28202711</a>, PubMed:<a href="http://www.uniprot.org/citations/37797010" target="\_blank">37797010</a>). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:<a href="http://www.uniprot.org/citations/15731107" target="\_blank">15731107</a>, PubMed:<a href="http://www.uniprot.org/citations/22634725" target="\_blank">22634725</a>, PubMed:<a href="http://www.uniprot.org/citations/28202711" target="\_blank">28202711</a>, PubMed:<a href="http://www.uniprot.org/citations/37797010" target="\_blank">37797010</a>). Binding generally results in the modulation of the activity of the binding partner (PubMed:<a href="http://www.uniprot.org/citations/15731107" target="\_blank">15731107</a>, PubMed:<a href="http://www.uniprot.org/citations/22634725" target="\_blank">22634725</a>, PubMed:<a href="http://www.uniprot.org/citations/28202711" target="\_blank">28202711</a>, PubMed:<a href="http://www.uniprot.org/citations/37797010" target="\_blank">37797010</a>). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (PubMed:<a href="http://www.uniprot.org/citations/37797010" target="\_blank">37797010</a>). Also acts as a TP53/p53-regulated inhibitor of G2/M progression (PubMed:<a href="http://www.uniprot.org/citations/9659898" target="\_blank">9659898</a>). 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:<a href="http://www.uniprot.org/citations/24124604" target="\_blank">24124604</a>). Also acts to facilitate PKP3 exchange at desmosome plaques, thereby maintaining keratinocyte intercellular adhesion (PubMed:<a href="http://www.uniprot.org/citations/29678907" target="\_blank">29678907</a>). May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53 (PubMed:<a href="http://www.uniprot.org/citations/18382127" target="\_blank">18382127</a>).

#### 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.

### Goat Anti-14-3-3 sigma / Stratifin Antibody - 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](#)

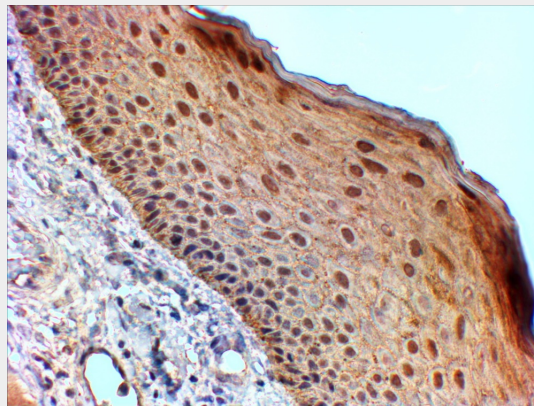
### Goat Anti-14-3-3 sigma / Stratifin Antibody - Images





250kDa  
150kDa  
100kDa  
75kDa  
50kDa  
37kDa  
25kDa  
20kDa  
15kDa  
10kDa

AF1001a (0.1 µg/ml) staining of human skin lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1001a (2µg/ml) staining of paraffin embedded Human Skin. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.

### Goat Anti-14-3-3 sigma / Stratifin Antibody - References

Hypermethylated 14-3-3-sigma and ESR1 gene promoters in serum as candidate biomarkers for the diagnosis and treatment efficacy of breast cancer metastasis. Zurita M, et al. BMC Cancer, 2010 May 20. PMID 20487521.

The expression of seven 14-3-3 isoforms in human meningioma. Liu Y, et al. Brain Res, 2010 Jun 8. PMID 20388496.

[Expression and clinical significance of 14-3-3 sigma and heat shock protein 27 in colorectal cancer] Pei HP, et al. Zhonghua Wei Chang Wai Ke Za Zhi, 2010 Mar. PMID 20336542.

Reduced stratifin expression can serve as an independent prognostic factor for poor survival in patients with esophageal squamous cell carcinoma. Ren HZ, et al. Dig Dis Sci, 2010 Sep. PMID 20108042.

Up-regulation of 14-3-3sigma (Stratifin) is associated with high-grade CIN and high-risk human papillomavirus (HPV) at baseline but does not predict outcomes of HR-HPV infections or incident CIN in the LAMS study. Syrj nen S, et al. Am J Clin Pathol, 2010 Feb. PMID 20093232.