10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-14-3-3 sigma (Phospho-S186) Antibody

Catalog # AP61454

Product Information

Application	WB
Primary Accession	P31947
Reactivity	Human, Mouse, Rat, Pig, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27774

Additional Information

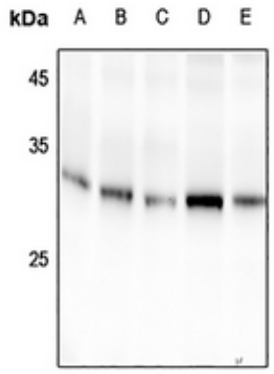
Gene ID	2810
Other Names	HME1; 14-3-3 protein sigma; Epithelial cell marker protein 1; Stratifin
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S186 of human 14-3-3 sigma protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SFN (HGNC:10773)
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). 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). Upstream regulator of YAP1 localization in keratinocytes: binds and sequester YAP1 in the cytoplasm, limiting YAP1-dependent transcription and driving Hippo signaling and cell differentiation (By similarity).
Cellular Location	Cytoplasm. Nucleus. Secreted Note=May be secreted by a non-classical secretory pathway
Tissue Location	Present mainly in tissues enriched in stratified squamous keratinizing epithelium.

Images



Western blot analysis of 14-3-3 sigma (Phospho-S186) expression in COS7 (A), MEF (B), SHSY5Y (C), HCT116 (D), A549 (E) whole cell lysates. (Predicted band size: 27 kD; Observed band size: 30 kD)

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