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Schillerstr. 5

AP22876SU-N Polyclonal Antibody to 14-3-3 protein sigma / SFN (N-term) -

Serum

Alternate names: Epithelial cell marker protein 1, HME1, Stratifin

Quantity: 50 μl

Background: 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, intracellular trafficking and targeting. Protein interactions with 14-3-3 show distinct preference for its different isotypes and are regulated by phosphorylation of both 14-3-3 and the bound protein. 14-3-3 sigma is expressed mostly in epithelial cells and has been associated with cancers including breast, nasopharyngeal, endometrial adenocarcinoma, prostate, epithelial ovarian, colorectal, adenoid cystic, and papillary. 14-3-3 sigma binds c-fos activating the MAPK

pathway. Sequestration of Bax by 14-3-3 sigma inhibits apoptosis whereas sequestration of 14-3-3 sigma by CARP-1 induces it. Mitosis is regulated by 14-3-3 sigma through binding keratin filaments and sequestering cyclin B1 and cdc2. p73-dependent induction of 14-3-3 sigma regulates chemo sensitivity in breast cancers with p53 mutations. In reaction to DNA damage and along with RACK1, 14-3-3 sigma targets, DeltaNp63alpha for proteasome degradation. 14-3-3 also negatively regulates both the glucocorticoid receptor and the activity of PKB/Akt which stabilizes

p27 Kip1.

Uniprot ID: <u>P31947</u>
NCBI: NP 006133

GenelD: 2810
Host: Rabbit

Immunogen: SFN antibody was raised against synthetic peptide corresponding to acetylated N-

terminal sequence of sheep 14-3-3 sigma.

AA Sequence:
Ac.MERASLIQKAC

Format: State: Liquid serum containing 0.09% sodium azide as preservative

Applications: Immunohistochemistry on Paraffin Sections: 1/250.

Western Blot.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody reacts to 14-3-3 Protein Sigma (SFN) in all mammals. May not react with

recombinant proteins that are not N-acetylated.

Species Reactivity: Tested: Sheep.

Expected from sequence similarity: Human, Mouse, Rat, Rabbit, Bovine and Chicken.

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Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for

longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Pictures: Human Skin (formalin-fixed, paraffin-

embedded) stained with SFN antibody AP22876SU-N at 1/250 followed by biotinylated goat anti-rabbit IgG secondary antibody, alkaline phosphatase-streptavidin and

chromogen.

