

## Basic Information

Product Name	Anti-14-3-3 Sigma/SFN Antibody
Gene Name	SFN
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human 14-3-3 sigma, identical to the related rat and mouse sequences.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	28 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200

## Storage

12 months from date of receipt, -20°C as supplied.

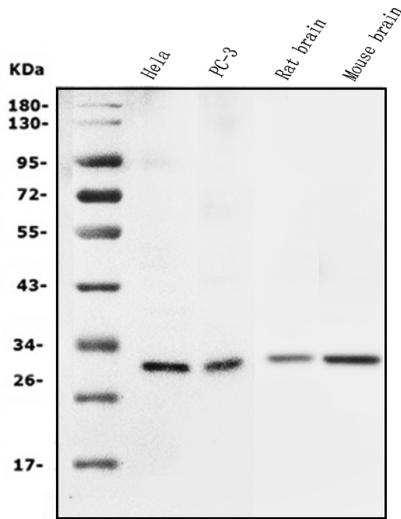
## Background Information

Stratifin(SFN), also known as 14-3-3 protein sigma, is strongly induced by gamma irradiation and other DNA-damaging agents. The induction of 14-3-3-sigma is mediated by a p53 -responsive element located 1.8 kb upstream of its transcription start site. Leffers et al.(1993) obtained peptide sequence and subsequently cloned a T-cell cDNA of the 14-3-3 family of conserved proteins. The protein, called stratifin, was shown to be diffusely distributed in the cytoplasm and was present in cultured epithelial cells. It was most abundant in tissues enriched in stratified keratinizing epithelium.

## Reference

Anti-14-3-3 Sigma/SFN Antibody被引用在3文献中。

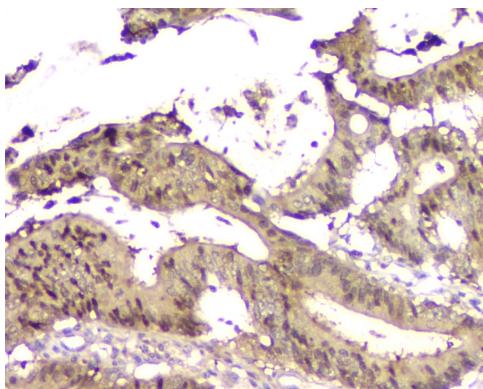
## Selected Validation Data



Western blot analysis of 14-3-3 Sigma/SFN using anti-14-3-3 Sigma/SFN antibody (BA3752). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

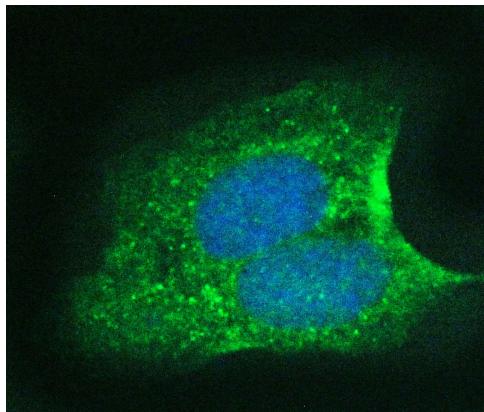
Lane 1: HELA whole cell lysates,  
Lane 2: PC-3 whole cell lysates,  
Lane 3: rat brain tissue lysates,  
Lane 4: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-14-3-3 Sigma/SFN antigen affinity purified polyclonal antibody (BA3752) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for 14-3-3 Sigma/SFN at approximately 28 kDa. The expected band size for 14-3-3 Sigma/SFN is at 28 kDa.



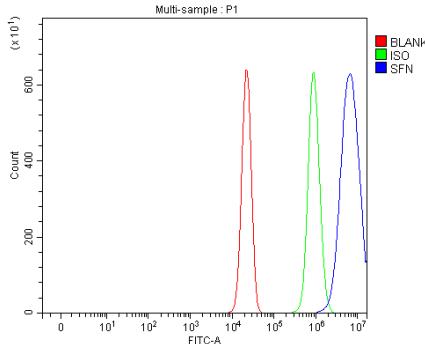
IHC analysis of 14-3-3 Sigma/SFN using anti-14-3-3 Sigma/SFN antibody (BA3752).

14-3-3 Sigma/SFN was detected in a paraffin-embedded section of human intestinal cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-14-3-3 Sigma/SFN Antibody (BA3752) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of 14-3-3 Sigma/SFN using anti-14-3-3 Sigma/SFN antibody (BA3752).

14-3-3 Sigma/SFN was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-14-3-3 Sigma/SFN Antibody (BA3752) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A431 cells using anti-14-3-3 Sigma/SFN antibody (BA3752).

Overlay histogram showing A431 cells stained with BA3752 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-14-3-3 Sigma/SFN Antibody (BA3752) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.