

## Basic Information

<b>Product Name</b>	Anti-S100A4 Antibody	
<b>Gene Name</b>	S100A4	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human S100A4 recombinant protein (Position: A2-K101).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	12 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

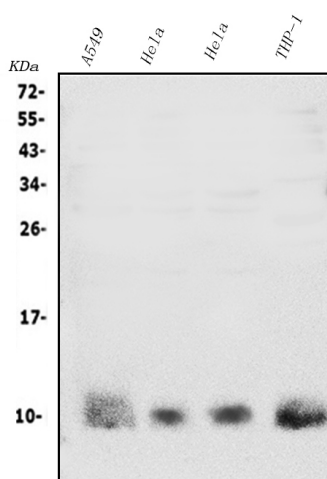
12 months from date of receipt, -20°C as supplied.

## Background Information

S100 calcium-binding protein A4 (S100A4) is a protein that in humans is encoded by the S100A4 gene. The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in motility, invasion, and tubulin polymerization. Chromosomal rearrangements and altered expression of this gene have been implicated in tumor

metastasis. Multiple alternatively spliced variants, encoding the same protein, have been identified.

## Selected Validation Data



Western blot analysis of S100A4 using anti-S100A4 antibody (A01217-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Human A549 whole cell lysates,

Lane 2: Human HELA whole cell lysates,

Lane 3: Human HELA whole cell lysates,

Lane 4: Human THP-1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-S100A4 antigen

affinity purified polyclonal antibody (A01217-2) at a dilution of

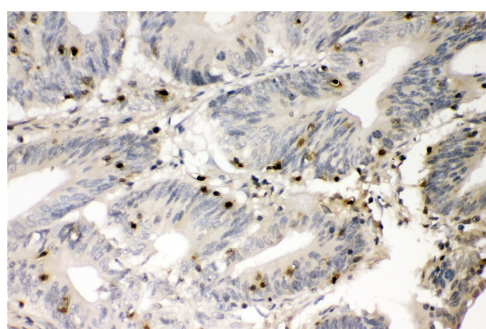
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for S100A4 at approximately 12 kDa. The expected band

size for S100A4 is at 12 kDa.



IHC analysis of S100A4 using anti-S100A4 antibody (A01217-2).

S100A4 was detected in a paraffin-embedded section of Human

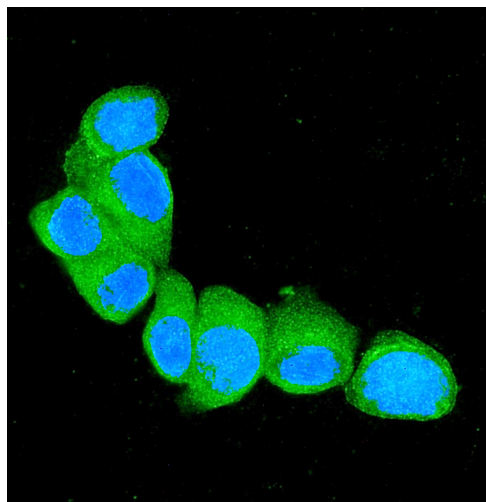
intestine Cancer tissue. Biotinylated goat anti-rabbit IgG was used as

secondary antibody. The tissue section was incubated with rabbit

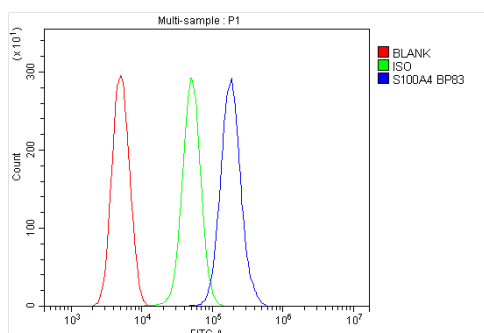
anti-S100A4 Antibody (A01217-2) at a dilution of 1:200 and

developed using Streptavidin-Biotin-Complex (SABC) (Catalog #

SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of S100A4 using anti-S100A4 antibody (A01217-2). S100A4 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with rabbit anti-S100A4 Antibody (A01217-2) 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 THP-1 cells using anti-S100A4 antibody (A01217-2).

Overlay histogram showing THP-1 cells stained with A01217-2 (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-S100A4 Antibody (A01217-2) 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.