

For Research Use Only

# S100A4 Monoclonal antibody

Catalog Number: 66489-1-Ig

Featured Product

21 Publications



## Basic Information

Catalog Number:

66489-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 425 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG9019

GenBank Accession Number:

BC016300

GeneID (NCBI):

6275

ENSEMBL Gene ID:

ENSG00000196154

UNIPROT ID:

P26447

Full Name:

S100 calcium binding protein A4

Calculated MW:

101 aa, 12 kDa

Observed MW:

12 kDa

Purification Method:

Protein A purification

CloneNo.:

2G11B4

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF/ICC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF, ELISA

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

Positive Controls:

WB: NK-92 cells, A375 cells, HeLa cells, PC-3 cells, THP-1 cells, A549 cells, NIH/3T3 cells, HSC-T6 cells

IHC: human lung cancer tissue, human colon cancer tissue, human tonsillitis tissue, K-562 cells, mouse lung tissue

IF/ICC: HepG2 cells, HeLa cells

## Background Information

S100A4 is a member of the S100 family of calcium-binding proteins. The S100 family members have been involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100A4 is known to localize to and function in the nucleus, cytoplasm of cells, and the extracellular space. S100A4 has also been shown to be associated with tumor growth, motility, invasion, metastasis, angiogenesis, apoptosis, and chemoresistance. It is a fibroblast-specific protein associated with mesenchymal cell morphology and motility, is expressed during epithelial-mesenchymal transformations (EMT) in vivo (PMID: 9362334). It is a specific prognostic marker for renal survival in patients with IgAN (PMID: 16105038). It is also an improved marker for lung fibroblasts that could be useful for investigating the pathogenesis of pulmonary fibrosis (PMID: 15618458). Overexpression of S100A4 is correlated with a worse prognosis in patients with various types of cancer.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaojuan Zhao	33058500	J Cell Mol Med	WB, IF
Jing Cheng	36313337	Front Pharmacol	IF
Zhenglong Guo	35306537	Cell Death Differ	IHC

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

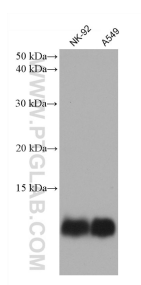
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

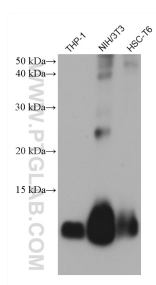
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

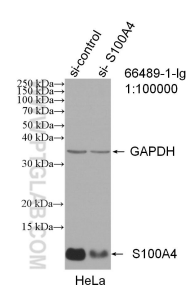
## Selected Validation Data



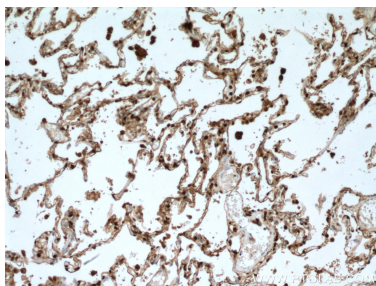
Various lysates were subjected to SDS PAGE followed by western blot with 66489-1-Ig (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



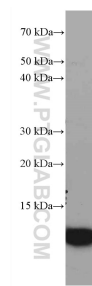
Various lysates were subjected to SDS PAGE followed by western blot with 66489-1-Ig (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



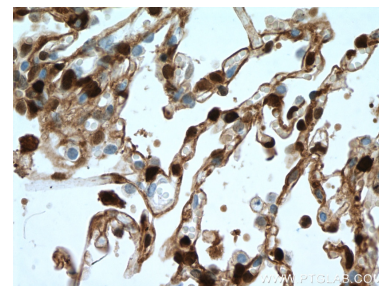
WB result of S100A4 antibody (66489-1-Ig; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-S100A4 transfected HeLa cells.



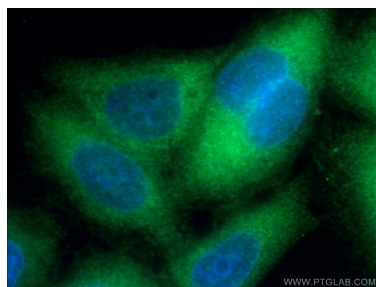
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66489-1-Ig (S100A4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



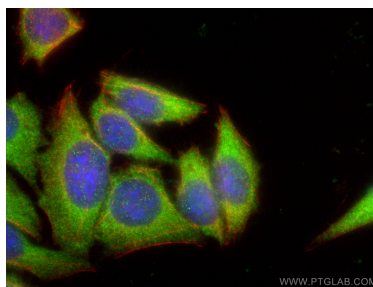
HeLa cells were subjected to SDS PAGE followed by western blot with 66489-1-Ig (S100A4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66489-1-Ig (S100A4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 66489-1-Ig (S100A4 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using S100A4 antibody (66489-1-Ig, Clone: 2G11B4) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).