

For Research Use Only

S100A4 Polyclonal antibody

Catalog Number: 16105-1-AP

Featured Product

65 Publications



Basic Information

Catalog Number:

16105-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

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:

10-12 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, IP, ELISA

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, pig

Positive Controls:

WB: A549 cells, HeLa cells, NIH/3T3 cells

IHC: human breast cancer tissue, human pancreas cancer tissue, human colon cancer tissue, mouse spleen tissue

IF/ICC: HeLa cells,

FC (Intra): HeLa cells,

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

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
Fei Yao	36163271	Inflamm Regen	WB,IF
Yixin Ren	30372905	Biomed Pharmacother	IHC
Kexin Ma	32961493	Ecotoxicol Environ Saf	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

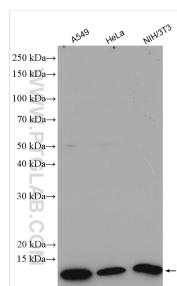
For technical support and original validation data for this product please contact:

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

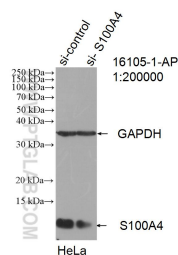
E: proteintech@ptglab.com
W: ptglab.com

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

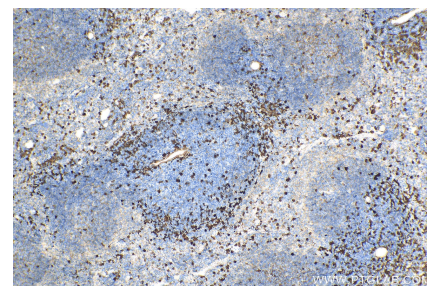
Selected Validation Data



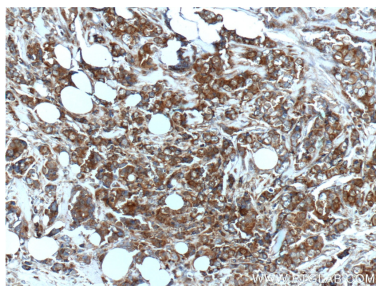
Various lysates were subjected to SDS PAGE followed by western blot with 16105-1-AP (S100A4 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



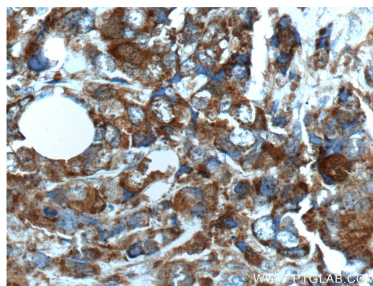
WB result of S100A4 antibody (16105-1-AP; 1:200000; incubated at room temperature for 1.5 hours) with sh-Control and sh-S100A4 transfected HeLa cells.



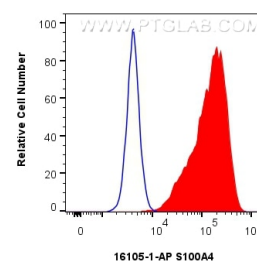
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 16105-1-AP (S100A4 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



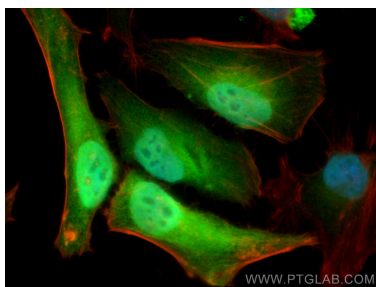
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16105-1-AP (S100A4 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 16105-1-AP (S100A4 Antibody) at dilution of 1:200 (under 40x lens).



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug FSP1/S100A4 Polyclonal antibody (16105-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using S100A4 antibody (16105-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).