For Research Use Only

S100A4 Monoclonal antibody

Catalog Number:66489-1-lg Featured Product

22 Publications



Basic Information

Catalog Number: 66489-1-lg

Concentration: 1000 ug/ml Source:

IgG2a Immunogen Catalog Number:

AG9019

Mouse

Isotype:

GenBank Accession Number:

BC016300 GeneID (NCBI): 6275

ENSEMBL Gene ID: ENSG00000196154 **UNIPROT ID:** P26447

S100 calcium binding protein A4

Calculated MW: 101 aa, 12 kDa Observed MW: 12 kDa

Full Name:

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. \$100A4 is known to localize to and function in the nucleus, cytoplasm of cells, and the extracellular space, \$100A4 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 inpatients 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

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

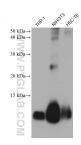
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

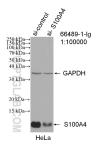
Selected Validation Data



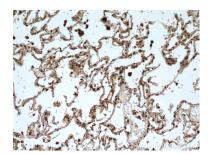
Various lysates were subjected to SDS PAGE followed by western blot with 66489-1-lg (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



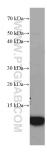
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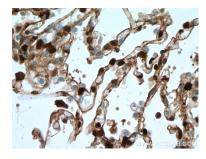
WB result of \$100A4 antibody (66489-1-lg; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-\$100A4 transfected HeLa cells.



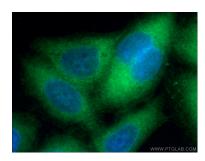
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66489-1-lg (S100A4 antibody) at dilution of 1:4000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



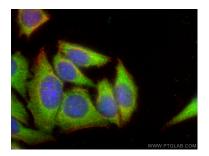
HeLa cells were subjected to SDS PAGE followed by western blot with 66489-1-1g (S100A4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded 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-lg (5100A4 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 \$100A4 antibody (66489-1-lg, Clone: 2G11B4) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).