

S100A4 Recombinant antibody

Catalog Number: 84221-1-RR

Basic Information

| | | |
|--|--|--|
| Catalog Number: 84221-1-RR | GenBank Accession Number: BC016300 | Purification Method: Protein A purification |
| Size: 1000 µg/ml | GeneID (NCBI): 6275 | CloneNo.: 241448A12 |
| Source: Rabbit | ENSEMBL Gene ID: ENSG00000196154 | Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:200-1:800 |
| Isotype: IgG | UNIPROT ID: P26447 | |
| Immunogen Catalog Number: AG9019 | Full Name: S100 calcium binding protein A4 | |
| | Calculated MW: 101 aa, 12 kDa | |
| | Observed MW: 10-12 kDa | |

Applications

| | |
|--|---|
| Tested Applications: WB, IF/ICC, FC (Intra), ELISA | Positive Controls: WB : A549 cells, HeLa cells, NIH/3T3 cells, C6 cells |
| Species Specificity: human | IF/ICC : HeLa cells, |

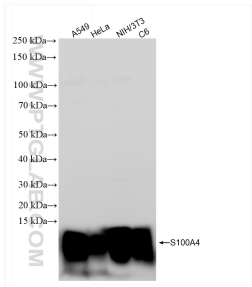
Background Information

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.

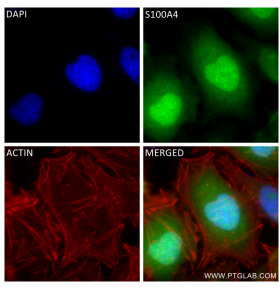
Storage

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

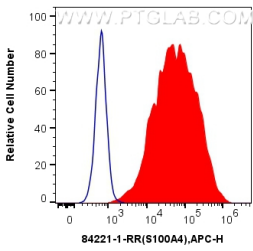
Selected Validation Data



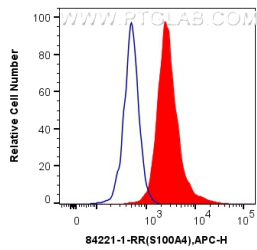
Various lysates were subjected to SDS PAGE followed by western blot with 84221-1-RR (S100A4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



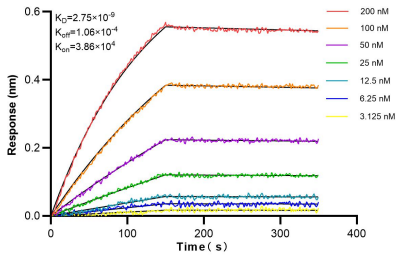
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using S100A4 antibody (84221-1-RR, Clone: 241448A12) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug S100A4 Recombinant antibody (84221-1-RR, Clone:241448A12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10⁶ Jurkat cells were intracellularly stained with 0.25 ug S100A4 Recombinant antibody (84221-1-RR, Clone:241448A12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Bi-layer interferometry (BLI) kinetic assays of 84221-1-RR against Human S100A4 were performed. The affinity constant is 2.75 nM.