

Basic Information

Product Name	Anti-S100A8 Antibody	
Gene Name	S100A8	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% Na ₃ N , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived mouse S100A8 recombinant protein (Position: P2-E89). Mouse S100A8 shares 58.6% and 80.5% amino acid (aa) sequence identity with human and rat S100A8, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	11KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

S100 calcium-binding protein A8 (S100A8) is a protein that in humans is encoded by the S100A8 gene. It is also known as calgranulin A. 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 the inhibition of casein kinase and as a cytokine. Altered expression of this protein is associated with the disease cystic fibrosis.

Selected Validation Data

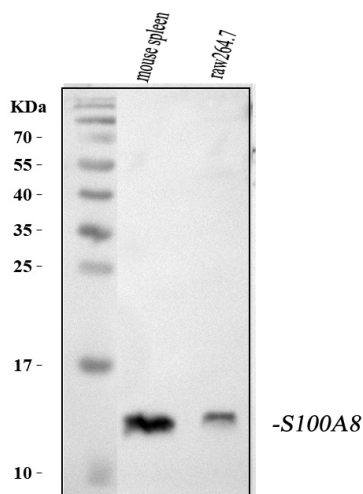


Figure 1. Western blot analysis of anti- S100A8 antibody (PB0767). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: mouse spleen tissue lysates,
Lane 2: raw264.7 whole cell lysates.
Use rabbit anti- S100A8 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for S100A8 at approximately 11kD. The expected band size for S100A8 is at 9kD.

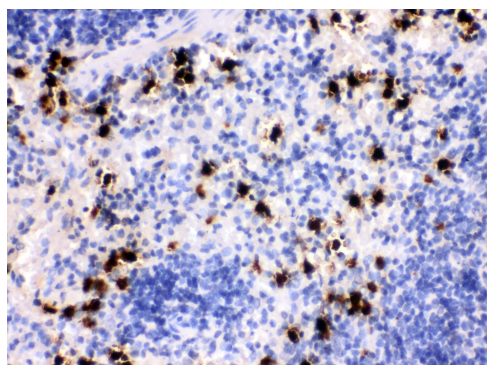


Figure 2. IHC analysis of S100A8 using anti-S100A8 antibody (PB0767).S100A8 was detected in paraffin-embedded section of Mouse Spleen Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-S100A8 Antibody (PB0767) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

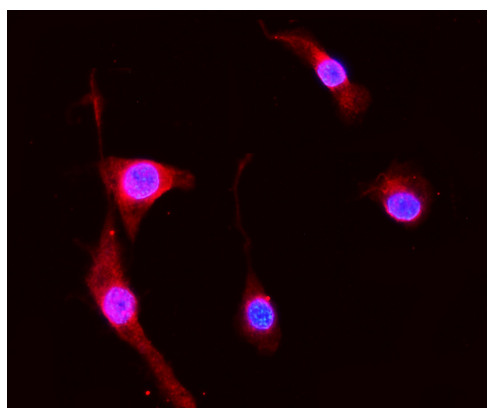


Figure 5. ICC analysis of anti- S100A8 antibody (PB0767).was detected in immunocytochemical section of NIH/3T3 cells. Cells were stained using the Dylight594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog # BA1142) and counterstained with DAPI (blue).

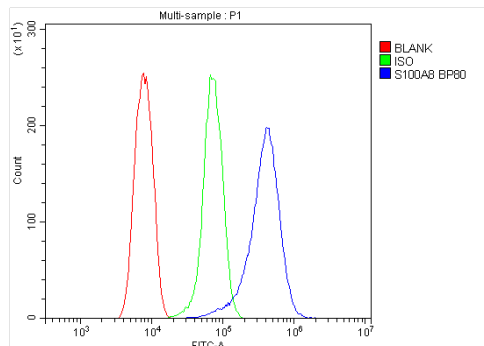


Figure 7. Flow cytometry analysis of HEPA1-6 cell(1x10⁶)
DyLight488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight488. Unlabelled sample (Red line).