

DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse S100A8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant mouse (rm) S100A9, rmS100A10, and recombinant human S100B is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse S100A8 Pro2-Glu89 Accession # P27005
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

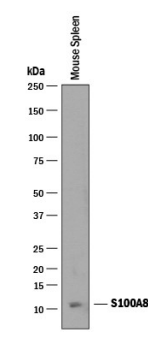
**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.25 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	2.5 µg/mL	See Below

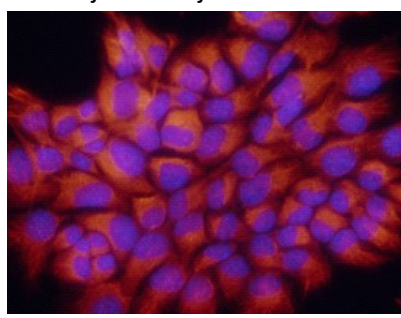
**DATA**

**Western Blot**



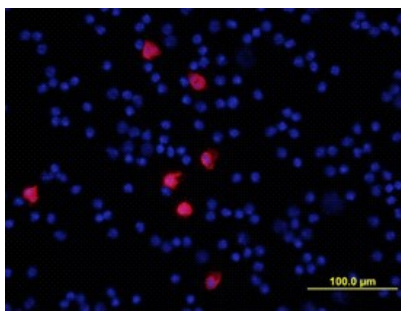
**Detection of Mouse S100A8 by Western Blot.** Western blot shows lysates of mouse spleen tissue. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Mouse S100A8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3059) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for S100A8 at approximately 10-11 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**



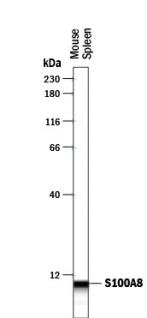
**S100A8 in NMuMG Mouse Cell Line.** S100A8 was detected in immersion fixed NMuMG mouse mammary gland epithelial cell line using 10 µg/mL Goat Anti-Mouse S100A8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3059) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**Immunocytochemistry**




**S100A8 in Mouse Splenocytes.** S100A8 was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse S100A8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3059) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

**Simple Western**



**Detection of Mouse S100A8 by Simple Western™.** Simple Western lane view shows lysates of mouse spleen tissue, loaded at 0.2 mg/mL. A specific band was detected for S100A8 at approximately 9 kDa (as indicated) using 2.5 µg/mL of Goat Anti-Mouse S100A8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3059) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Mouse S100A8, also known as CP-10, Calgranulin A and MRP8, is a 10 kDa member of the S100 family of calcium-binding proteins. S100A8 contains short sequential modules, including an N-terminal  $\alpha$ -helix, a  $\text{Ca}^{++}$ -binding EF-hand segment, a short central linker region, a second EF-hand segment, and a C-terminal  $\alpha$ -helix. S100A8 noncovalently heterodimerizes with S100A9. In the presence of  $\text{Ca}^{++}$ , the heterodimers form heterotetramers. The dimeric complex is found both intracellularly and extracellularly. It binds to heparan sulfate and is chemotactic for PMNs and macrophages. The amino acid sequence of mouse S100A8 is 80% and 57% identical to that of rat and human S100A8, respectively.