

**DESCRIPTION**

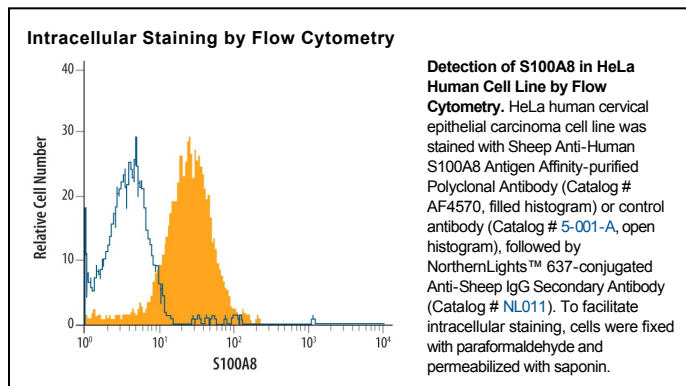
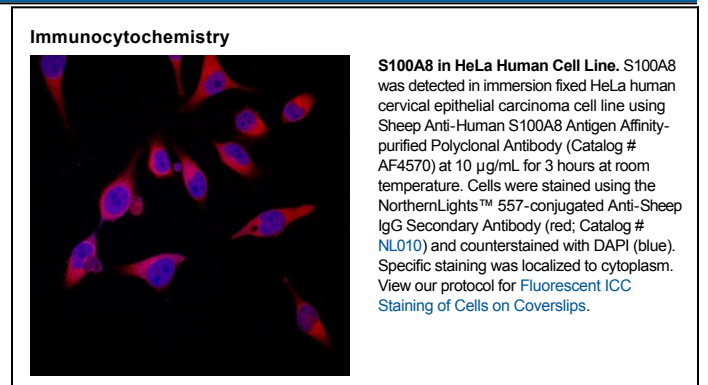
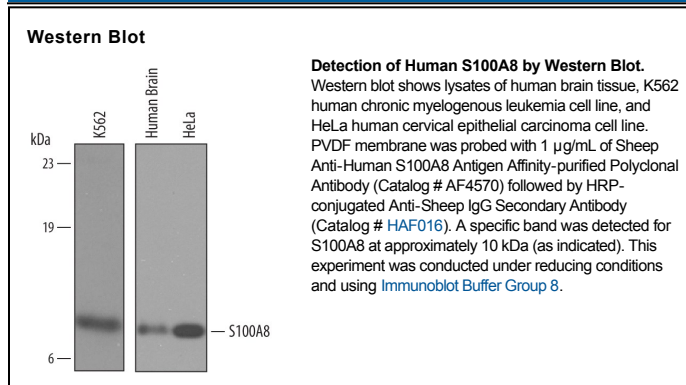
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human S100A8 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant mouse S100A8, recombinant human (rh) S100A1, and rhS100P is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human S100A8 Met1-Glu93 Accession # P05109
<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 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**



**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

S100A8 (also known as MRP8 and calgranulin A) is a 10 kDa member of the S100 family, EF-hand superfamily of Ca-binding proteins. It is produced by neutrophils and monocytes, and forms Ca-dependent heterodimer/heterotetramer complexes (termed calprotectin) with S100A9. It functions both intracellularly and extracellularly, where it binds to RAGE and CD36. Human S100A8 is 93 amino acids (aa) in length. It contains two EF-hand motifs (aa 12-47 and 46-81) and one high-affinity Ca-binding site (aa 59-70). There may be one splice form that shows a 15 aa substitution for the C-terminal 14 amino acids. Although mouse S100A8 is cleaved by MMP-2 after Asn21, it is unclear if human S100A8 is susceptible. Full-length human S100A8 is 57% and 74% aa identical to mouse and canine S100A8, respectively.