

## 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<br>Met1-Glu93<br>Accession # P05109                                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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>CyTOF-ready</b>                              | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                             | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>                      | Optimal dilution of this antibody should be experimentally determined. |
| <b>Intracellular Staining by Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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.

## PRODUCT SPECIFIC NOTICES

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