

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse S100A8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 40% cross-reactivity with recombinant human (rh) S100A8 is observed and no cross-reactivity with recombinant mouse (rm) S100A4, rmS100A9, rmS100A10, rmS100A11, rh             |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2B</sub> Clone # 335806                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse S100A8<br>Met1-Glu89 (predicted)<br>Accession # P27005                                                                                                                                                                            |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 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>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</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

Mouse S100A8 (also CP-10, calgranulin A and MRP8) is a 10 kDa member of the S100 family of calcium-binding proteins. The S100A8 protein is 89 amino acids (aa) in length and contains short, sequential modules. There is an N-terminal  $\alpha$ -helix, followed by a calcium-binding EF-hand segment, and a C-terminal  $\alpha$ -helix. S100A8 will noncovalently heterodimerize with S100A9. In the presence of calcium, this heterodimer will form a heterotetramer. The dimeric complex is both intracellular and extracellular. It binds heparan sulfate and is chemotactic for PMNs and macrophages. Mouse S100A8 shares 80% and 57% aa sequence identity with rat and human S100A8, respectively.

## PRODUCT SPECIFIC NOTICES

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