

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse S100A16 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human S100A16 is observed, and less than 1% cross-reactivity with recombinant mouse S100A4, recombinant human (rh) S100A2, and              |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | E.coli-derived recombinant mouse S100A16<br>Ala2-Ser124<br>Accession # NP_080692                                                                                                                                                                                            |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

Mouse S100A16 (S100 calcium-binding protein A16; also S100F and AAG13) is a 15-18 kDa member of the S100 family of calcium-binding proteins. It is found in both cytoplasm (when Ca is high) and nucleus (when Ca is low), and its expression appears to be restricted to astrocytes found in select areas of the brain. S100A16 is 124 amino acids (aa) in length. Based on human, it will contain an N-terminal non-Ca-binding EF-hand domain (aa 12-47), a C-terminal Ca-binding EF-hand domain (aa 54-89), and a putative FGF-1 binding site (aa 91-94). There is one potential myristoylation site (aa 54-59) and a phosphorylation site at Ser124. S100A16 will homodimerize, and perhaps form higher order oligomers. Full length mouse S100A16 shares 95% aa identity with rat S100A16. Relative to human S100A16, mouse S100A16 possesses a 21 aa Glu/Gln-rich insertion after Glu98 that reduces the shared aa homology between mouse and human S100A16 to 72% aa identity.

## PRODUCT SPECIFIC NOTICES

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