



Rabbit Anti-Mouse S100A1 monoclonal antibody, clone S259 (CABT-ZB997)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Mouse S100A1 It has no cross-reactivity in ELISA with Mouse S100B.
Target	S100A1
Immunogen	Recombinant Mouse S100A1 protein
Isotype	IgG2a
Source/Host	Rabbit
Species Reactivity	Mouse
Clone	S259
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA, ELISA(det) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB657 - CABT-ZB997 This antibody will detect S100A1 in antibody pair set. [ABPR-ZB236]
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Mouse S100A1.
Format	Purified, Liquid
Concentration	Lot specific
Size	50 µL, 100 µL, 1 mL

Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	S100A1 is a Ca ²⁺ binding protein of the EF-hand type that belongs to the S100 protein family. S100 proteins consisting of at least 19 members exist as dimers in the cytoplasm and/or nucleus of a wide range of cells, and are involved in the regulation of a number of cellular processes such as cell-cycle progression and cell differentiation. This protein has been shown to function in the processes including stimulation of Ca ²⁺ -induced Ca ²⁺ release, inhibition of microtubule assembly, and inhibition of PKC-mediated phosphorylation. Phosphoglucosyltransferase is a target protein whose activity is antagonistically regulated by S100A1, and recently, S100A1 is also identified as a potent molecular chaperone and a new member of the Hsp70/Hsp90 multichaperone complex. S100A1 displays a tissue-specific expression pattern with highest levels in myocardium and is considered to be an important regulator of cardiac contractility. Accordingly, reduced expression or mutations of S100A1 gene have been implicated in cardiomyopathies.
Keywords	S100A1; S100 calcium binding protein A1; S100; S100A

GENE INFORMATION

Synonyms	S100A1; S100 calcium binding protein A1; S100; S100A; S100-alpha; protein S100-A1; S100 alpha; S-100 protein alpha chain; S-100 protein subunit alpha; S100 calcium-binding protein A1; S100 protein, alpha polypeptide
Entrez Gene ID	20193
UniProt ID	P56565