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# anti-S100A1 antibody

**Images** 



#### Overview

Quantity:	100 μL
Target:	S100A1
Reactivity:	Human, Cow
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This S100A1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

### **Product Details**

Purpose:	Rabbit polyclonal antibodies to Bovine S100
Immunogen:	Native source protein
Isotype:	IgG, IgM
Specificity:	Specific to all isotypes (alpha:alpha, alpha:beta and beta:beta)
Cross-Reactivity (Details):	May cross-react with other species
Purification:	Protein A affinity column

## Target Details

Target:	S100A1
Alternative Name:	S100 (S100A1 Products)
Background:	Small calcium binding protein that plays important roles in several biological processes such as

#### **Target Details**

Ca2+ homeostasis, chondrocyte biology and cardiomyocyte regulation. In response to an increase in intracellular Ca2+ levels, binds calcium which triggers conformational changes. These changes allow interactions with specific target proteins and modulate their activity. Regulates a network in cardiomyocytes controlling sarcoplasmic reticulum Ca2+ cycling and mitochondrial function through interaction with the ryanodine receptors RYR1 and RYR2, sarcoplasmic reticulum Ca2+-ATPase/ATP2A2 and mitochondrial F1-ATPase. Facilitates diastolic Ca2+ dissociation and myofilament mechanics in order to improve relaxation during diastole

Molecular Weight:

10668 Da (beta), 10518 Da (alpha)

Pathways:

Regulation of Muscle Cell Differentiation, Toll-Like Receptors Cascades, S100 Proteins

#### **Application Details**

Application Notes: Western blot: 0.1-1.0 μg/mL

Restrictions: For Research Use only

#### Handling

Format:

Concentration:

Lot specific

Buffer:

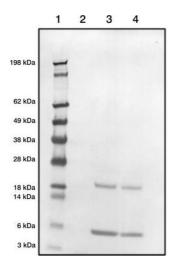
Glycine pH 7.2

Storage:

4 °C,-80 °C

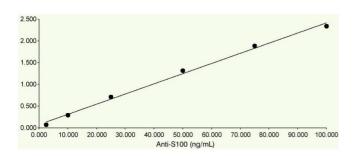
Storage Comment:

Short term up to 1 month at 2-8°C, long term can be held for up to five years at -70°C



#### **Western Blotting**

**Image 1.** Western blot demonstrating our polyclonal detecting native bovine S100 (P02638, P02639) at 1in2000 dilution (1 = Marker, 2 = Blank, 3 = S100 (3 $\mu$ ), 4=S100 (3 $\mu$ ))



#### **ELISA**

**Image 2.** ELISA Plates were coated with 1  $\mu$ g/mL Bovine S100 protein, our polyclonal rabbit anti-S100 was added at different concentrations and detected with an anti-rabbit HRP.