

Rat Protein S100-A1 (S100A1) ELISA Kit

Catalog No: #EK7491



Package Size: #EK7491-1 48T #EK7491-2 96T

Orders: order@signalwayantibody.com

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Description

Product Name	Rat Protein S100-A1 (S100A1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	S100; S100-alpha; S100A; S100 alpha S100 calcium-binding protein A1 S100 protein; alpha polypeptide
Accession No.	P35467
Uniprot	P35467
GeneID	295214;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.061 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate S100A1 in samples. An antibody specific for S100A1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyS100A1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for S100A1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of S100A1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:A1is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. This protein may function in stimulation of Ca²⁺-induced Ca²⁺ release, inhibition of microtubule assembly, and inhibition of protein kinase C-mediated phosphorylation.

Reduced expression of this protein has been implicated in cardiomyopathies. S100A1 overexpression enhances cardiac contractile performance which suggests that S100A1 is a regulator of myocardial contractility. S100A1 improves cardiac performance both by regulating calcium ion handling by the sarcoplasmic reticulum and the responsiveness of myofibrils to calcium ion.

Note: This product is for in vitro research use only