APB769Hu01 10μg
Active S100 Calcium Binding Protein A6 (S100A6)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Met1~Gly90
Tags: N-terminal His-tag
Purity: >92%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays; In vivo assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.7
Predicted Molecular Mass: 16.9kDa
Accurate Molecular Mass: 16kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8^{o}C for one month.
Aliquot and store at -80^{o}C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

MACPLDQAIG LLVAIFHKYS GREGDKHTLS KKELKELIQK ELTIGSKLQD AEIARLMEDL DRNKDQEVNF QEYVTFLGAL ALIYNEALKG

[ACTIVITY]

S100A6 is a calcium-binding protein, which functions as calcium sensor and modulator, contributing to cellular calcium signaling. It is reported that S100B and S100A6 differentially modulate cell survival by Interacting with distinct RAGE (Receptor for Advanced Glycation End Products). Thus a binding ELISA assay was conducted to detect the interaction of S100A6 and RAGE. Briefly, recombinant human S100A6 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to RAGE-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-S100A6 mAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of of S100A6 and RAGE was shown in Figure 1, and this effect was in a dose dependent manner.

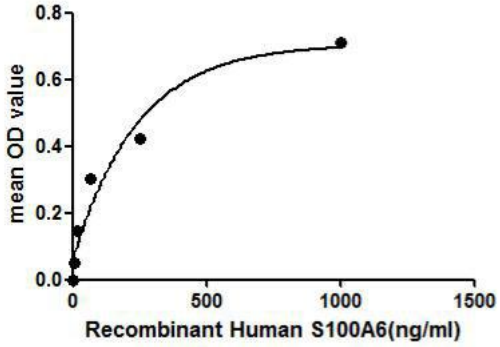

Figure 1. The binding activity of S100A6 with RAGE.

[IDENTIFICATION]

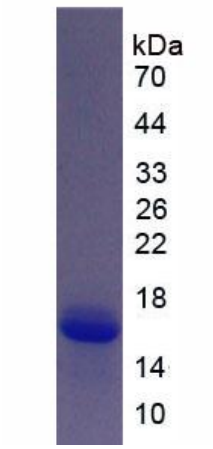

Figure 2. SDS-PAGE

Sample: Active recombinant S100A6, Human

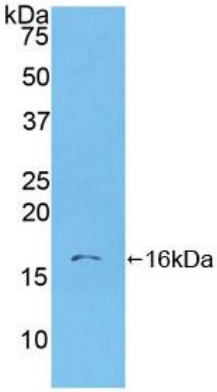

Figure 3. Western Blot

Sample: Recombinant S100A6, Human;

Antibody: Rabbit Anti-Human S100A6 Ab (PAB769Hu01)

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.