

Active S100 Calcium Binding Protein B (S100B) Instruction Manual

SBPA149Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 90%

Isoelectric Point

5.3

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

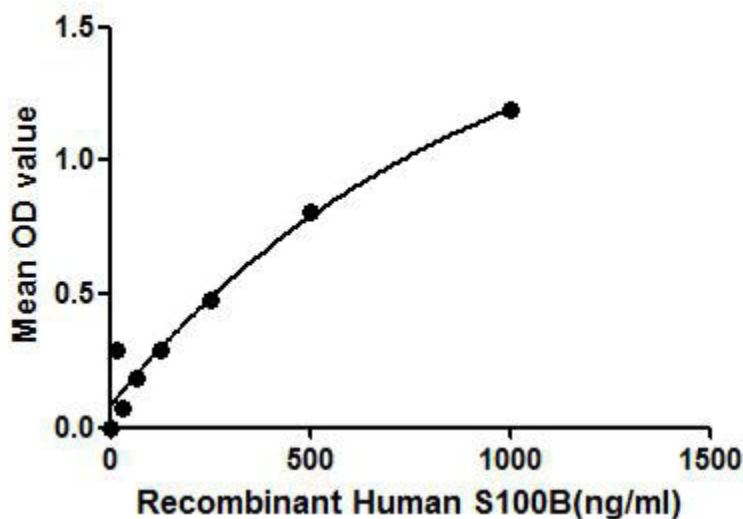


Figure. The binding activity of S100B with RAGE.

Protein S100B is a member of the S100 family. S100 proteins are EF-hand calcium-binding proteins and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. Experimental results suggest that the receptor for advanced glycation end products (RAGE) plays important roles in mediating S100 protein-induced cellular signaling. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human S100B and recombinant human RAGE. Briefly, S100B 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-S100B 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 S100B and RAGE was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

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

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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 37°C 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.

Image

A T G T C T G A G C T G G A G A G C C A T G G T G G C C C T C A T C G A G T T T C C A C A T A T T C T G A G G G G G G G C A G C A G C A G C T G A G A T C C G A C T G A G G A C T C A C A C A T G A C T T T C C A T T C T A G A G A A T C A A G C G C A G G C T T G T G G A A G T C T G A A C A C T G G A C A T G T G A G C C G G A T C G C T T
M S E L E K A M V A L I D V F E Q Y S G R E G D E H L K E S E L K E L I N U R L S H P L E R I K E Q E V V D E V H E T L D N D G D G R C D F

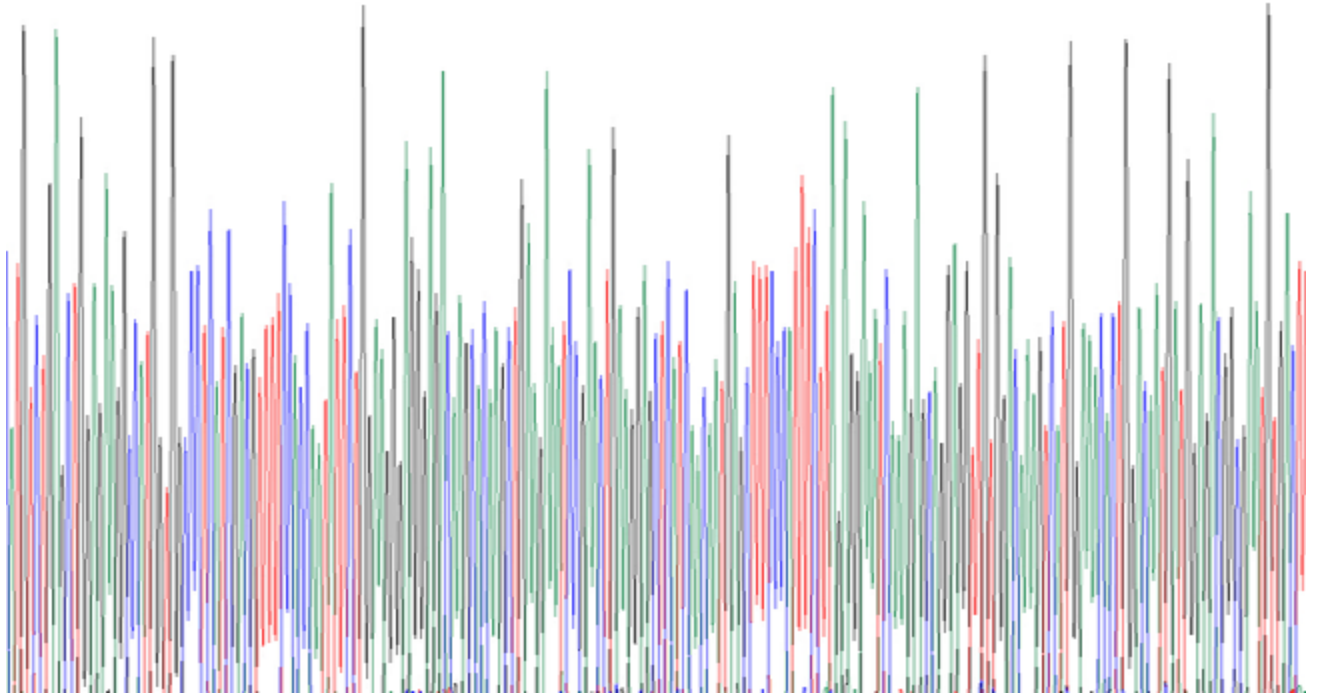


Figure. Gene Sequencing (Extract)

Image

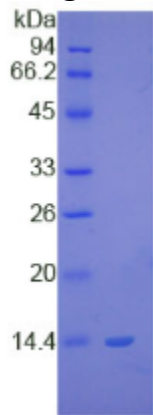


Figure. SDS-PAGE

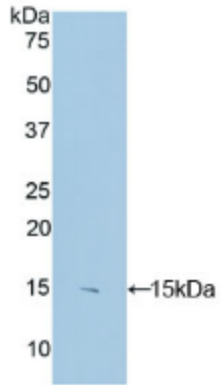


Figure. Western Blot

[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.