

Active Inter Alpha-Globulin Inhibitor H4 (ITIH4) Instruction Manual

SBPH379Hu03

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	> 97%
Isoelectric Point	6.9
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

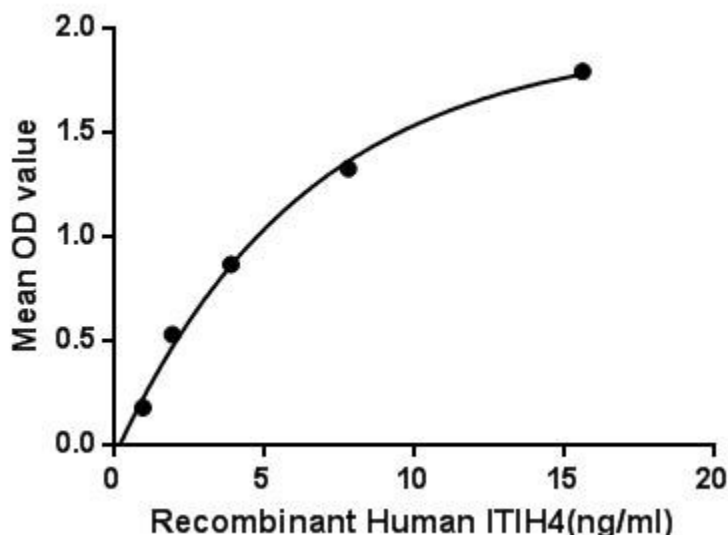


Figure. The binding activity of ITIH4 with Grb2.

Inter Alpha-Globulin Inhibitor H4 (ITIH4) is secreted into the blood, where it is cleaved by plasma kallikrein into two smaller forms. ITIH4 has been detected only in liver, and it seems to be upregulated during surgical trauma. It may also play a role in liver development or regeneration. Besides, Growth Factor Receptor Bound Protein 2 (Grb2) has been identified as an interactor of ITIH4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ITIH4 and recombinant human Grb2. Briefly, ITIH4 were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples

of 100uL were then transferred to Grb2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ITIH4 pAb, 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 ITIH4 and Grb2 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

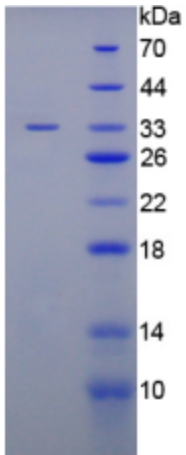


Figure. SDS-PAGE

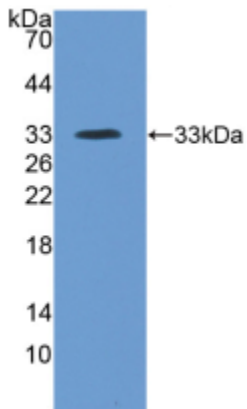


Figure. Western Blot

[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.