

Active Fatty Acid Binding Protein 4 (FABP4) Instruction Manual

SBPB262Hu61

Homo sapiens (Human)

Buffer Formulation

PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 90%

Isoelectric Point

6.8

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

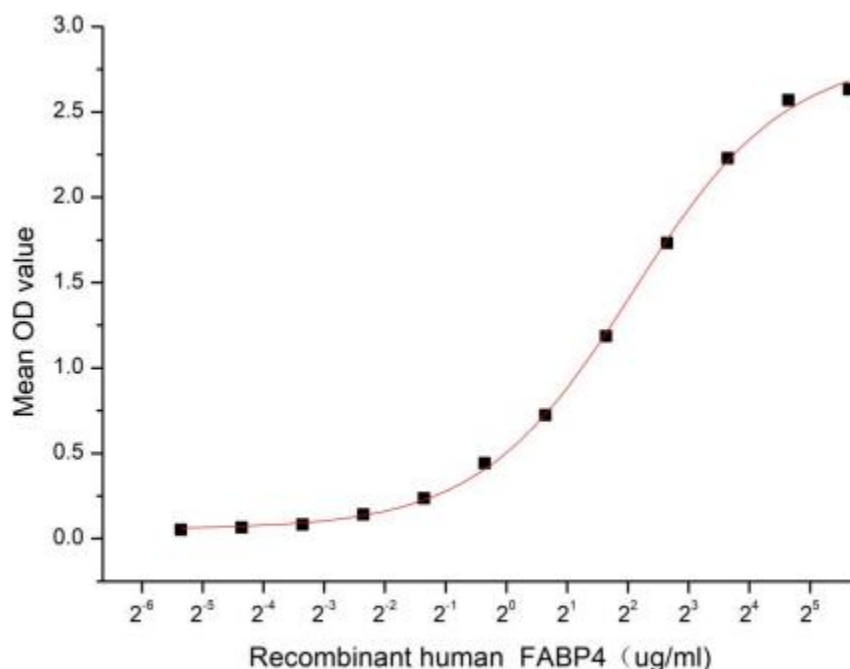


Figure 1. The binding activity of recombinant human FABP4 and human LIPE

Fatty acid binding protein-4 (FABP4) is a member of a large superfamily of lipid binding proteins that are expressed in a tissue specific manner. FABP4 is one of ten cytoplasmic FABPs that are 14-15 kDa in size and range from 126-140 amino acids (aa) in length. Although all are highly conserved in their tertiary structure, there is only modest aa identity between any two members. Lipase, Hormone Sensitive (LIPE) has been

identified as an interactor of FABP4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FABP4 and recombinant human LIPE. Briefly, FABP4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to LIPE-coated microtiter wells and incubated for 1h at 37°C. Wells were aspirated and incubated for 1h with anti-FABP4 mAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µL stop solution to the wells and read at 450 nm immediately. The binding activity of FABP4 and LIPE was shown in Figure 1, and this effect was in a dose dependent manner. The EC50 for this effect is 4.23 ug/mL.

USAGE

Reconstitute in 10mM PBS (pH7.4) 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

TGTCAGCTTTGGAGTCTGGAACTGTCCTCGTCAAACTTTCAGATATTCAGAGAGTGGAGCTGGCTTTGGCCAGGAGTGGCTGGCATGGTAACTTACATGATCATAGCTGAAAGGGAGTGCACCATTAATTCGAAAGTCCCTTAAATATCTGAGATTCTCTATCTGGGCGA
CD&FVGTWKLVSSEWFDDYHKEVGVGFATRKY&GM&XPNHIIISVNGDVITIKSESTFKNTEISFILGQ:

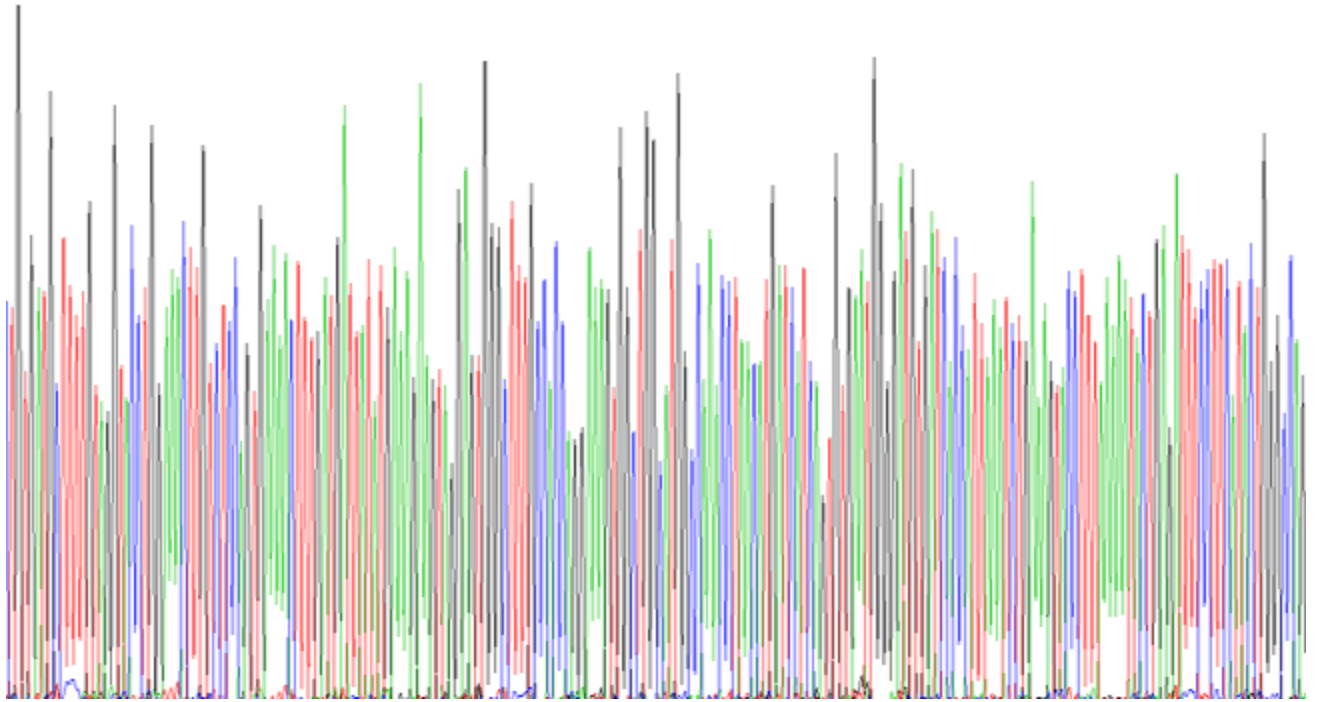


Figure. Gene Sequencing (Extract)

Image

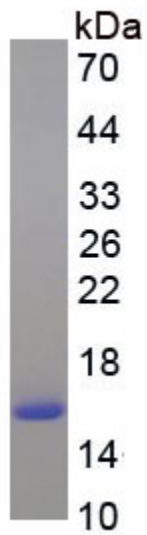


Figure. SDS-PAGE

[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.