APG886Hu01 200μg

Active Cold Inducible RNA Binding Protein (CIRBP)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Met1~Glu172

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 0.01% SKL, 5% Trehalose .

Original Concentration: 200μg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 9.7

Predicted Molecular Mass: 21.7kDa

Accurate Molecular Mass: 22kDa 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 2-8ºC for one month.

Aliquot and store at -80ºC 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]

MASDEGKLFV GGLSFDTNEQ SLEQVFSKYG QISEVVVVKD RETQRSRGFG
FVTFENIDDA KDAMMAMNGK SVDGRQIRVD QAGKSSDNRS RGYRGGSAGG
RGFFRGGRGR GRGFSRGGGD RGYGGNRFES RSGGYGGSRD YYSSRSQSGG
YSDRSSGGSY RDSYDSYATH NE

[ACTIVITY]

CIRBP (Cold-inducible RNA-binding protein) is considered to play a protective role in the genotoxic stress response by stabilizing transcripts of genes involved in cell survival and act as a translational activator. Besides, ATXN1 (Ataxin-1) has been proven as an interactor of CIRBP. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human CIRBP and recombinant human ATXN1. Briefly, CIRBP were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ATXN1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-CIRBP 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 CIRBP and ATXN1 was shown in Figure 1, and this effect was in a dose dependent manner.

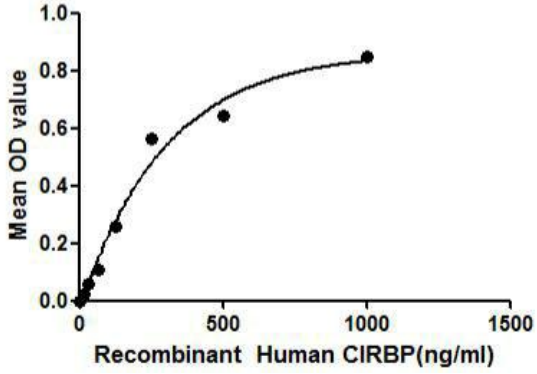

Figure 1. The binding activity of CIRBP with ATXN1.

[IDENTIFICATION]

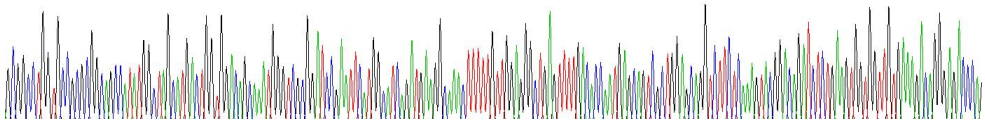

Figure 2. Gene Sequencing (extract)

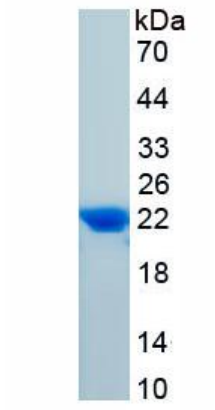

Figure 3. SDS-PAGE

Sample: Active recombinant CIRBP, Human

[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.