

APB290Hu01 200µg
Active V-Myc Myelocytomatosis Viral Oncogene Homolog (MYC)
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: Ser184~Ala454

Tags: Two N-terminal Tags, His-tag and GST-tag

Purity: >98%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 100µg/mL

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: 6.6

Predicted Molecular Mass: 60.2kDa

Accurate Molecular Mass: 65kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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°C for one month.

Aliquot and store at -80°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 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.

[SEQUENCE]

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SECIDPSVVF PYPLNDSSSP KSCASQDSSA FSPSSDILLS STESSPQGSP
EPLVLHEETP PTTSSDSEEE QEDEEEIDVV SVEKRQAPGK RSESGSPSAG
GHSKPPHSPL VLKRVHSTH QHNYAAPPST RKDYPAAKRV KLDSVRVLRQ
ISNNRKTSP RSSDTEENVK RRTHNVLERQ RRNELKRSFF ALRDQIPELE
NNEKAPKVVI LKKATAYILS VQAEEQKLIS EEDLLRKRRE QLKHKLEQLR
NSCA
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[ACTIVITY]

MYC (Myc proto-oncogene protein) is a nuclear phosphoprotein that binds specific sequence of DNA. MYC functions as a transcription factor and regulates transcription of target genes. It has been proven that c-Myc protein is intracellularly associated with TBP (TATA-binding protein) of the TFIID transcription initiation complex; besides, TRRAP (Transformation/transcription domain-associated protein) is thought to be an essential cofactor for the MYC. Thus a binding ELISA assay was conducted to detect the interaction of MYC with TBP and TRRAP.

Briefly, recombinant human MYC were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TBP-coated and TRRAP microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MYC 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 MYC with TBP and TRRAP was shown in Figure 1 and Figure 2 separately, and this effect was in a dose dependent manner.

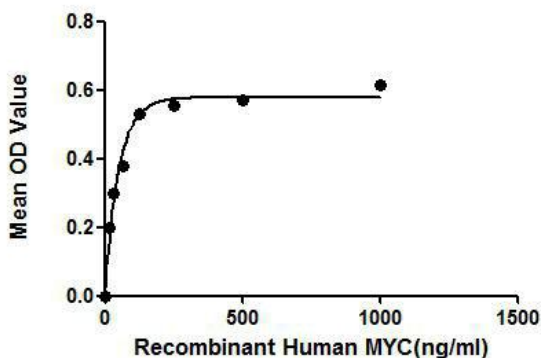


Figure 1. The binding activity of MYC with TBP.

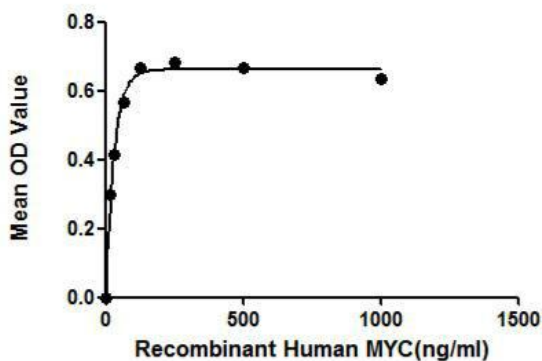


Figure 2. The binding activity of MYC with TRRAP

[IDENTIFICATION]

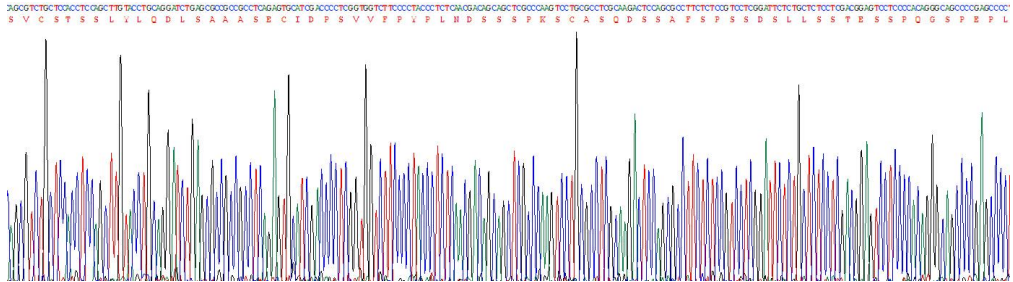


Figure 3. Gene Sequencing (extract)

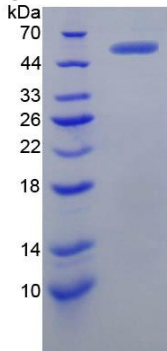


Figure 4. SDS-PAGE

Sample: Active recombinant MYC, Human

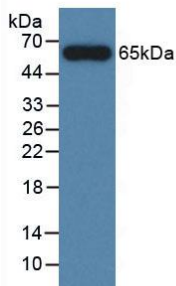


Figure 5. Western Blot

Sample: Recombinant MYC, Human;

Antibody: Rabbit Anti-Human MYC Ab (PAB290Hu01)

[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.