APB776Mu01 100μg
Active Interferon Regulatory Factor 8 (IRF8)
Organism Species: *Mus musculus (Mouse)*
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~Arg327
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 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: 7.9
Predicted Molecular Mass: 40.9kDa
Accurate Molecular Mass: 41kDa as determined by SDS-PAGE reducing conditions.

[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 2-8ºC 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]

MCDRNGGRRL RQWLIEQIDS SMYPGLIWEN DEKTMFRIPW KHAGKQDYNQ
EVDASIFKAW AVFKGKFKEG DKAEPATWKT RLRCALNKSP DFEEVTDRSQ
LDISEPYKVY RIVPEEEQKC KLGVAPAGCM SEVPEMECGR SEIEELIKEP
SVDEYMGMTK RSPSPPEACR SQILPDWWVQ QPSAGLPLVT GYAAYDTHHS
AFSQMVISFY YGGKLVGQAT TTCLEGCRLS LSQPGLPKLY GPDGLEPVCF
PTADTIPSER QRQVTRKLFG HLERGVLLHS NRKGVFVKRL CQGRVFCSGN
AVVCKGRPNK LERDEVVQVF DTNQFIR

[ACTIVITY]

Interferon regulatory factor 8 (IRF8), also known as interferon consensus sequence-binding protein, is a transcription factor that plays central roles in the regulation of myeloid cell fate. In both mice and humans, IRF8 is required for the differentiation of most monocyte and dendritic cell subsets, but suppresses neutrophil production. IRF8 can both act as a transcriptional activator or repressor, and it acts as a transcriptional repressor of osteoclast differentiation factors such as NFATC1 and EEIG1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse IRF8 and recombinant mouse NFATC1. Briefly, IRF8 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to NFATC1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-IRF8 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 μL stop solution to the wells and read at 450/630

nm immediately. The binding activity of recombinant mouse IRF8 and recombinant mouse NFATC1 was shown in Figure 1, the EC50 for this effect is 0.05 ug/mL.

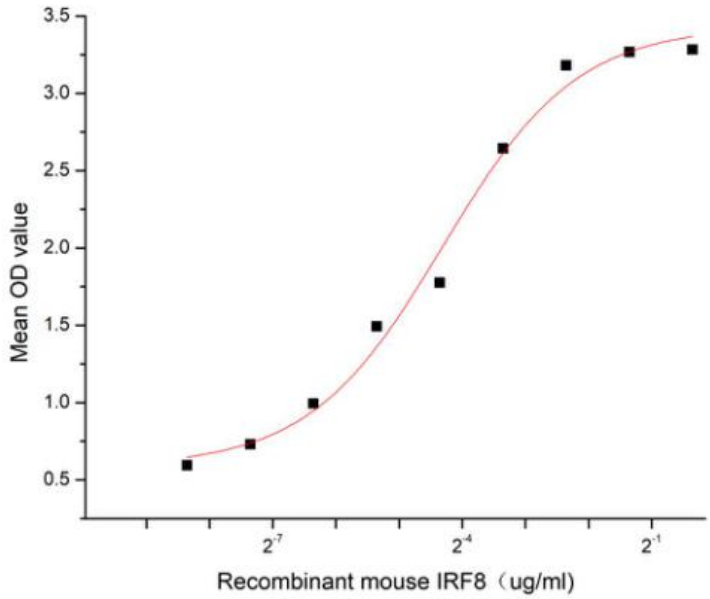

Figure 1. The binding activity of recombinant mouse IRF8 and recombinant mouse NFATC1

[IDENTIFICATION]

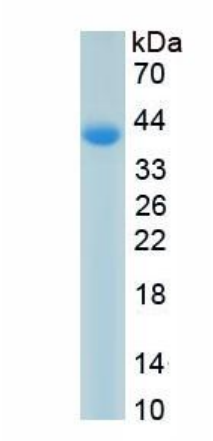

Figure 2. SDS-PAGE

Sample: Active recombinant IRF8, Mouse

[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.