

**APA045Mu01 100µg**

**Active Colony Stimulating Factor 2, Granulocyte Macrophage (GMCSF)**

**Organism Species: *Mus musculus* (Mouse)**

***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1th Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Pro19~Lys141

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

**Purity:** >92%

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

**Buffer Formulation:** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and Proclin300.

**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:** 5.9

**Predicted Molecular Mass:** 44.0kDa

**Accurate Molecular Mass:** 44kDa 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 2-8°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 ]

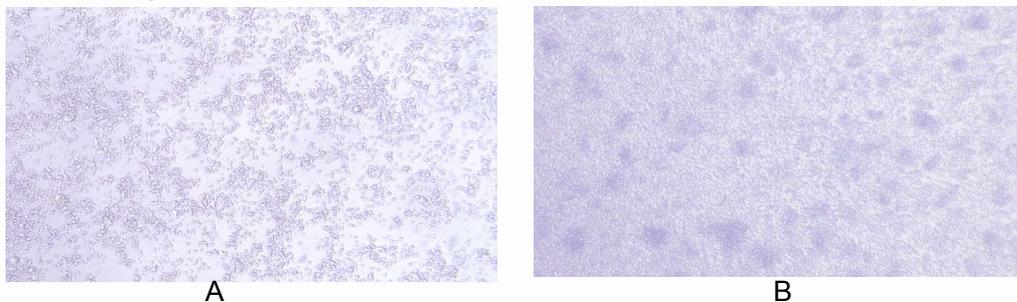
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PT RSPITVTRPW KHVEAIKEAL NLLDDMPVTL  
NEEEVVSNE FSFKLTCVQ TRLKIFEQGL RGNFTKLKGA LNMTASYYYQT  
YCPPTPETDC ETQVTTYADF IDSLKTFLTD IPFECKKPGQ K
```

## [ ACTIVITY ]

Measured in a cell proliferation assay using mouse BMDC (bone marrow derived dendritic cells). The ED<sub>50</sub> (median effective dose) for this effect is less than 0.25 ng/mL.

In-house data of APA045Mu01 used in cellular experiment:

Six-eight weeks old Balb/c mice were used for BMDC. At first, mouse femur and tibia were taken out, and then bone marrow was washed out with serum-free RPMI 1640 medium, followed by centrifugation at 1200RPM for 5min (4°C). ACK buffer was added to get rid of red blood cells, and then, centrifuged at 1200RPM for 5min (4°C). Cell pellets were collected and re-suspended, the cells were cultured in DMEM medium supplemented with 10% FBS, or DMEM medium supplemented with 10% FBS and GMCSF (APA045Mu01) at 37°C with 5% CO<sub>2</sub> in thermostatic incubator. Three days later, cells were observed by microscope, and the result is shown in Figure 1.

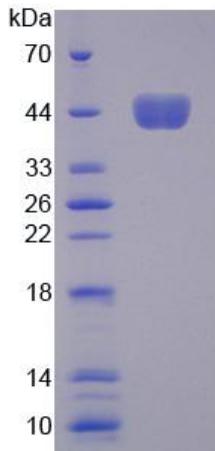


**Figure 1. Effect of GMCSF on BMDC.**

**(A) BMDC cultured in DMEM supplemented with 10%FBS;**

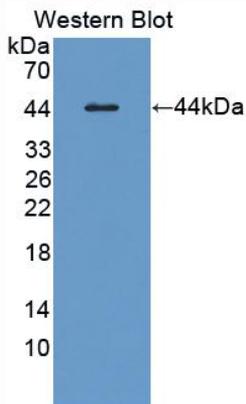
**(B) BMDC cultured in DMEM supplemented with 10%FBS and GMCSF.**

**[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant GMCSF, Mouse**



**Figure 3. Western Blot**

**Sample: Recombinant GMCSF, Mouse;**

**Antibody: Rabbit Anti-Mouse GMCSF Ab (PAA045Mu01)**