APB668Mu01 100μg
Active Golgi Protein 73 (GP73)
Organism Species: Mus musculus (Mouse)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Ser133~Ser379
Tags: Two N-terminal Tags, His-tag and GST-tag
Purity: >98%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.2
Predicted Molecular Mass: 57.8kDa
Accurate Molecular Mass: 58kDa 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^{o}C for one month.
Aliquot and store at -80^{o}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 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]

SLQQDIFQ FQKNQTSLEK
KFSYDLNQCI SQMTEVKEQC DERIEEVIRK RNEAPGSRDL AETNNQHQQA
LKPQPKLQEE VPSEEQMPQE KGDVPRNKSQ IPAPNSESLG LKPQVQNEET
NEIQAVGEEH QQASIQGQAV ADGTRVGAEK LDQHTQLPAG LLARPEEDSQ
YPEREQLVIR DRQEQQRASE EGGGQKNPGD EYDMDENEAE SEREKQAALA
GNDRNINVLN ADAQKRGIIN VPVGSERQS

[ACTIVITY]

Golgi Protein 73 (GP73) also known as Golgi phosphoprotein 2 or Golgi membrane protein GP73 is a protein that encoded by the GOLM1 gene. The Golgi complex plays a key role in the sorting and modification of proteins exported from the endoplasmic reticulum. It has been observed to be upregulated in response to viral infection. Besides, Dymeclin (DYM) has been identified as an interactor of GP73, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse GP73 and recombinant human DYM. Briefly, GP73 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to DYM-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-GP73 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℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of of GP73 and DYM was shown in Figure 1, and this effect was in a dose dependent manner.

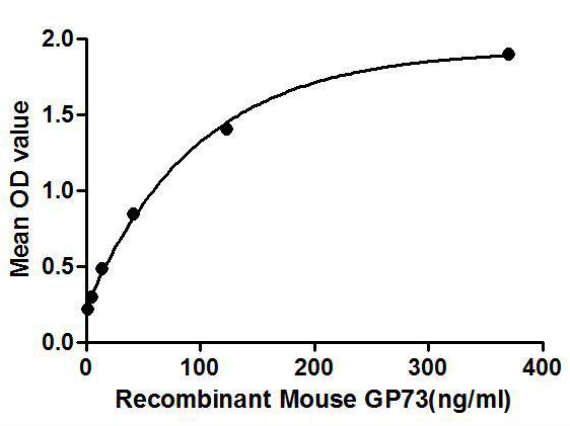

Figure 1. The binding activity of GP73 with DYM.

[IDENTIFICATION]

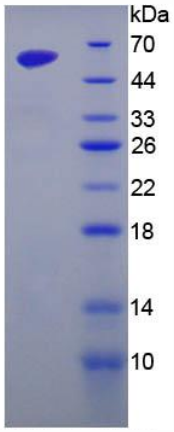

Figure 2. SDS-PAGE

Sample: Active recombinant GP73, Mouse

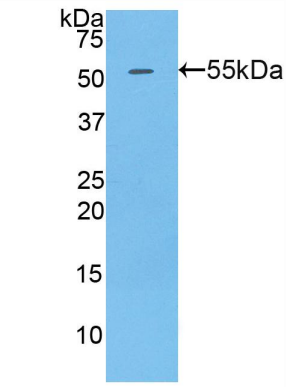

Figure 3. Western Blot

Sample: Recombinant GP73, Mouse;

Antibody: Rabbit Anti-Mouse GP73 Ab (PAB668Mu01)