APA867Hu01 100μg
Active Phospholipase A2, Lipoprotein Associated (LpPLA2)
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: Phe22~Asn441
Tags: N-terminal His-tag
Purity: >95%
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: 7.1
Predicted Molecular Mass: 49.0kDa
Accurate Molecular Mass: 50kDa 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]

FDWQYINPV AHMKSSAWVN KIQVLMAAAS
FGQTKIPRGN GPYSVGCTDL MFDHTNKGTF LRLYYPSQDN DRLDTLWIPN
KEYFWGLSKF LGTHWLMGNI LRLLFGSMTT PANWNSPLRP GEKYPLVVFS
HGLGAFRTLY SAIGIDLASH GFIVAAVEHR DRSASATYYF KDQSAAEIGD
KSWLYLRTLK QEEETHIRNE QVRQRAKECS QALSLILDID HGKPVKNALD
LKFDMEQLKD SIDREKIAVI GHSFGGATVI QTLSEDQRFR CGIALDAWMF
PLGDEVYSRI PQPLFFINSE YFQYPANIIK MKKCYSPDKE RKMITIRGSV
HQNFADFTFA TGKIIGHMLK LKGDIDSNVA IDLSNKASLA FLQKHLGLHK
DFDQWDCLIE GDDENLIPGT NINTTNQHIM LQNSSGIEKY N

[ACTIVITY]

Phospholipase A2, Lipoprotein Associated (LpPLA2) also known as platelet-activating factor acetylhydrolase (PAF-AH) is a phospholipase A2 enzyme. LpPLA2 is platelet-activating factor (PAF) acetylhydrolase, a secreted enzyme that catalyzes the degradation of PAF to inactive products by hydrolysis of the acetyl group at the sn-2 position, producing the biologically inactive products LYSO-PAF and acetate. Besides, Protein Tyrosine Phosphatase Receptor Type N (PTPRN) has been identified as an interactor of LpPLA2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human LpPLA2 and recombinant human PTPRN. Briefly, LpPLA2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to PTPRN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-LpPLA2 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 LpPLA2 and PTPRN was shown in Figure 1, and this effect was in a dose dependent manner.

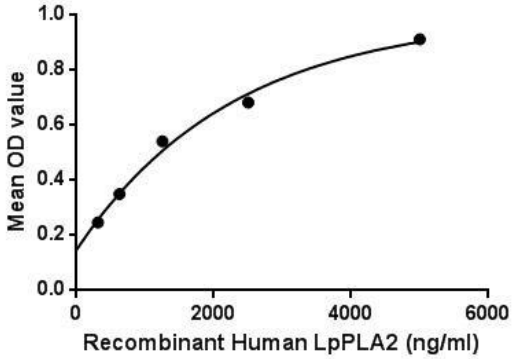

Figure 1. The binding activity of LpPLA2 with PTPRN.

[IDENTIFICATION]

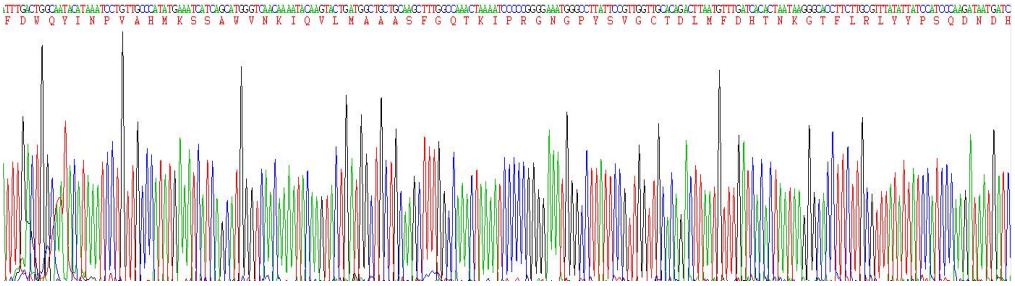

Figure 2. Gene Sequencing (extract)

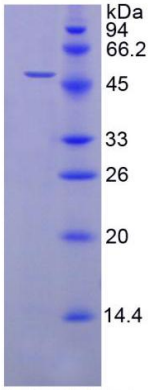

Figure 3. SDS-PAGE

Sample: Active recombinant LpPLA2, Human

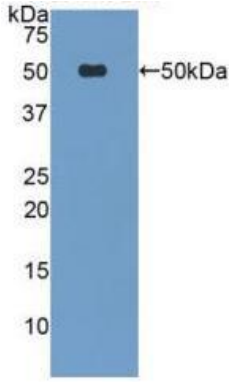

Figure 4. Western Blot

Sample: Recombinant LpPLA2, Human;

Antibody: Rabbit Anti-Human LpPLA2 Ab (PAA867Hu01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.