APD178Hu01 5μg
Active Paraoxonase 3 (PON3)
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: Gly2~Leu354
Tags: N-terminal His-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: 43.2kDa
Accurate Molecular Mass: 43kDa 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 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]

GKLVALVLL GVGLSLVGEM FLAFRERVNA SREVEPVEPE NCHLIEELES
GSEDIDILPS GLAFISSGLK YPGMPNFAPD EPGKIFLMDL NEQNPRAQAL
EISGGFDKEL FNPHGISIFI DKDNTVYLYV VNHPHMKSTV EIFKFEEQQR
SLVYLKTIKH ELLKSVNDIV VLGPEQFYAT RDHYFTNSLL SFFEMILDLR
WTYVLFYSPR EVKVVAKGFC SANGITVSAD QKYVYYADVA AKNIHIMEKH
DNWDLTQLKV IQLGTLVDNL TVDPATGDIL AGCHPNPMKL LNYNPEDPPG
SEVLRIQNVL SEKPRVSTVY ANNGSVLQGT SVASVYHGKI LIGTVFHKTL
YCEL

[ACTIVITY]

Paraoxonase 3 (PON3) is secreted into the bloodstream and associates with high-density lipoprotein (HDL). PON3 also rapidly hydrolyzes lactones and can inhibit the oxidation of low-density lipoprotein, a function that is believed to slow the initiation and progression of atherosclerosis. Besides, Paraoxonase 1 (PON1) has been identified as an interactor of PON3, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PON3 and recombinant human PON1. Briefly, PON3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to PON1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-PON3 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 PON3 and PON1 was shown in Figure 1, and this effect was in a dose dependent manner.

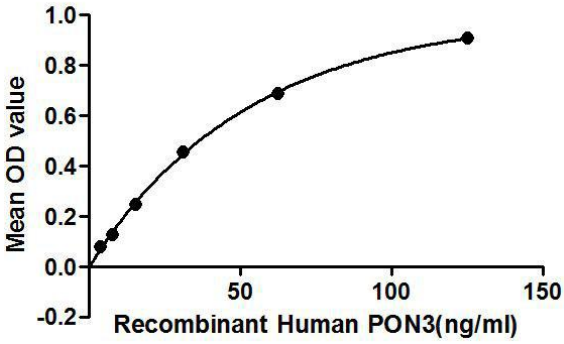

Figure 1. The binding activity of PON3 with PON1.

[IDENTIFICATION]

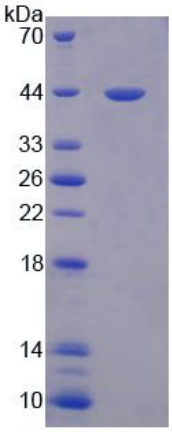

Figure 2. SDS-PAGE

Sample: Active recombinant PON3, Human

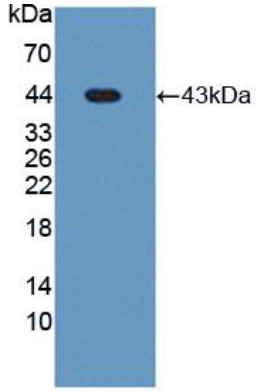

Figure 3. Western Blot

Sample: Recombinant PON3, Human;

Antibody: Rabbit Anti-Human PON3 Ab (PAD178Hu01)

[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.