APA711Hu01 100μg
Active Heparanase (HPA)
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: Pro400~Ile543
Tags: N-terminal His-tag
Purity: >97%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
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: 9.9
Predicted Molecular Mass: 17.6kDa
Accurate Molecular Mass: 20kDa 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]

P

LPDYWLSLLF KKLVGTKVLM ASVQGSKRRK LRVYLHCTNT DNPRYKEGDL
TLYAINLHNV TKYLRLPYPF SNKQVDKYLL RPLGPHGLLS KSVQLNGLTL
KMVDDQTLPP LMEKPLRPGS SLGLPAFSYS FFVIRNAKVA ACI

[ACTIVITY]

Heparanase(HPA), also known as HPSE, is an enzyme that acts both at the cell-surface and within the extracellular matrix to degrade polymeric heparan sulfate molecules into shorter chain length oligosaccharides. Besides, Epithelial Cell Transforming Sequence 2 (ECT2) has been identified as an interactor of HPA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human HPA and recombinant human ECT2. Briefly, HPA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to ECT2-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-HPA 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 HPA and ECT2 was shown in Figure 1, and this effect was in a dose dependent manner.

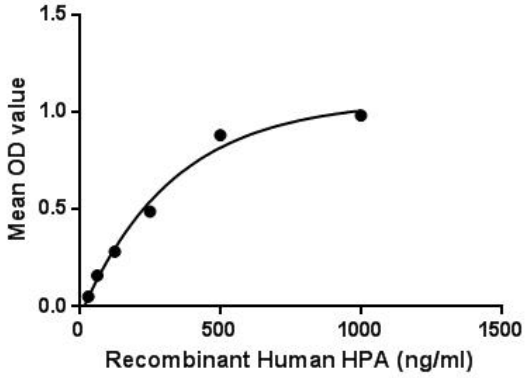

Figure 1. The binding activity of HPA with ECT2

[IDENTIFICATION]

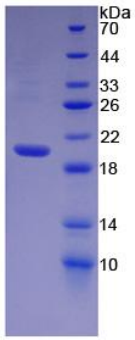

Figure 2. SDS-PAGE

Sample: Active recombinant HPA, Human

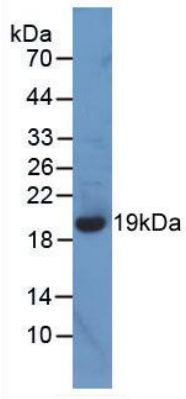

Figure 3. Western Blot

Sample: Recombinant HPA, Human;

Antibody: Rabbit Anti-Human HPA Ab (PAA711Hu01)

[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.