

APH755Hu01 100µg
Active Kynurenine-3-Monooxygenase (KMO)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Met1~Ser374

Tags: N-terminal His-tag

Purity: >90%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.0

Predicted Molecular Mass: 46.0kDa

Accurate Molecular Mass: 46kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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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MDSSVIQRKK VAVIGGGLVG SLQACFLAKR NFQIDVYEAR EDTRVATFTR
GRSINLALSH RGRQALKAVG LEDQIVSQGI PMRARMIHSL SGKKSAPYGP
TKSQYILSVS RENLNKDLLT AAEKYPNVKM HFNHRLKCN PEEGMITVLG
SDKVPKDVTCLIVGCDGAY STVRSHLMKK PRFDYSQQYI PHGYMELTIP
PKNGDYAMEP NYLHIWPRNT FMMIALPNMN KSFTCTLFMP FEEFEKLLTS
NDVVDFFQKY FPDIAPLIGE KLLVQDFLL PAQPMISVKC SSFHFKSHCV
LLGDAAHAIV PFFGQGMNAG FEDCLVDEL MDKFSNDLSL CLPVFSRLRI
PDDHAISDLS MYNYIEMRAH VNSS
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[ACTIVITY]

Kynurenine 3-monooxygenase (KMO), also known as kynurenine 3-hydroxylase, is an enzyme that plays a crucial role in the metabolism of kynurenine, a derivative of tryptophan, an essential amino acid. is an enzyme that plays a crucial role in the metabolism of kynurenine, a derivative of tryptophan, an essential amino acid. The study revealed that the combination of Aminoacidase Aminotransferase (AADAT) with KMO can affect its catalytic activity and metabolic pathway, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human KMO and recombinant human AADAT. Briefly, Briefly, biotin-linked KMO were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to AADAT-coated microtiter wells and incubated for 1h at 37 °C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of KMO and AADAT was shown in Figure 1, the EC50 for this

effect is 0.22ug/mL.

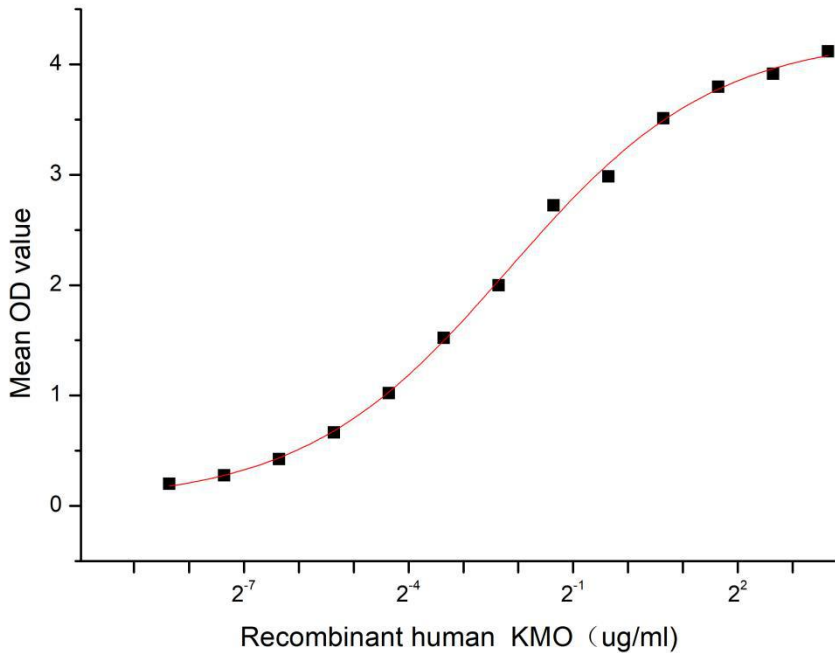


Figure 1. The binding activity of recombinant human KMO and recombinant human AADAT

[IDENTIFICATION]

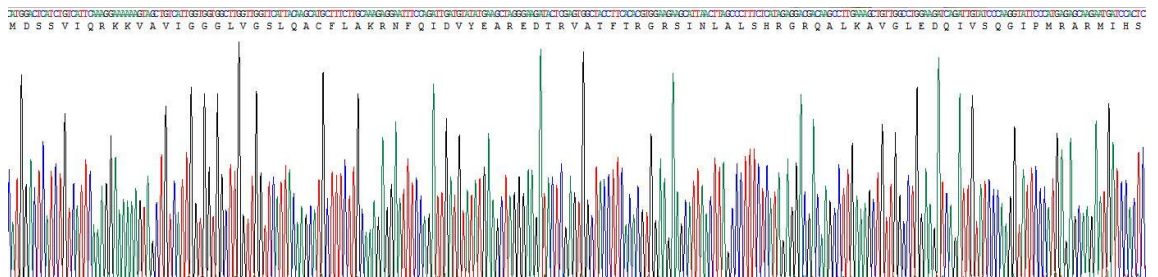


Figure 2. Gene Sequencing (extract)

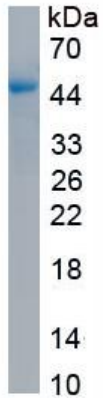


Figure 3. SDS-PAGE

Sample: Active recombinant KMO, Human

[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.