APG610Hu01 50μg
Active Arylsulfatase B (ARSB)
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: Leu81~Met533
Tags: N-terminal His-tag
Purity: >80%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Original Concentration: 300μg/mL
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 7.7
Predicted Molecular Mass: 55.2kDa
Accurate Molecular Mass: 55kDa 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 2-8ºC for one month.
Aliquot and store at -80ºC 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]

LLDNYYTQPL CTPSRSQLLT
GRYQIRTGLQ HQIIWPCQPS CVPLDEKLLP QLLKEAGYTT HMVGKWHLGM
YRKECLPTRR GFDTYFGYLL GSEDYYSHER CTLIDALNVT RCALDFRDGE
EVATGYKNMY STNIFTKRAI ALITNHPPEK PLFLYLALQS VHEPLQVPEE
YLKPYDFIQD KNRHHYAGMV SLMDEAVGNV TAALKSSGLW NNTVFIFSTD
NGGQTLAGGN NWPLRGRKWS LWEGGVRGVG FVASPLLKQK GVKNRELIHI
SDWLPTLVKL ARGHTNGTKP LDGFDVWKTI SEGSPSPRIE LLHNIDPNFV
DSSPCPRNSM APAKDDSSLP EYSAFNTSVH AAIRHGNWKL LTGYPGCGYW
FPPPSQYNVS EIPSSDPPTK TLWLFDIDRD PEERHDLSRE YPHIVTKLLS
RLQFYHKHSV PVYFPAQDPR CDPKATGVWG PWM

[ACTIVITY]

Arylsulfatase B (ARSB) is a lysosomal enzyme of the sulfatase family. ARSB hydrolyzes sulfate groups of N-Acetyl-D-galactosamine, chondriotin sulfate, and dermatan sulfate. The protein is targetted to the lysozyme. Besides, Plasminogen Activator, Urokinase Receptor (uPAR) has been identified as an interactor of ARSB, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ARSB and recombinant human uPAR. Briefly, ARSB were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to uPAR-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-ARSB 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 ARSB and uPAR was shown in Figure 1, and this effect was in a dose dependent manner.

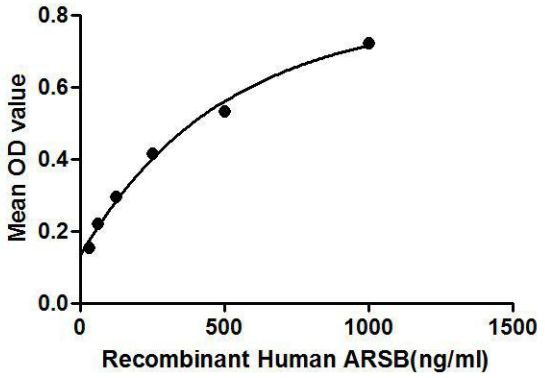

Figure 1. The binding activity of ARSB with uPAR.

[IDENTIFICATION]

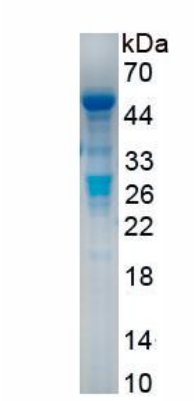

Figure 2. SDS-PAGE

Sample: Active recombinant ARSB, 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.