

Lipoprotein, a Active Protein | Lpa active protein

Active Lipoprotein, a (Lpa)

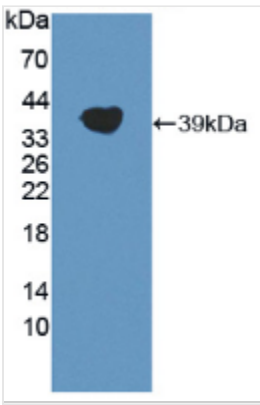
CATALOG # AAA150102	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	------------------------	---	---

PRODUCT SYNONYMS

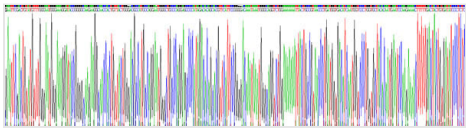
Lipoprotein; a; Active Lipoprotein; a (Lpa); Lp(a); AK38; APOA; LP; Sinking Pre-beta-Lipoprotein; Lpa active protein

PRODUCT SPECIFICATIONS

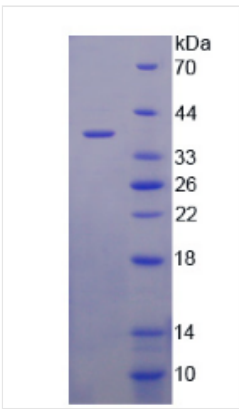
Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>90%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose .
Concentration	Original Concentration: 200ug/mL (varies by lot)
Applicable Applications for Lpa active protein	Activity Assay, Cell Culture
Source	Prokaryotic expression
Residues	Asp1719~Arg2038
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	8.4
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree 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 degree 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.



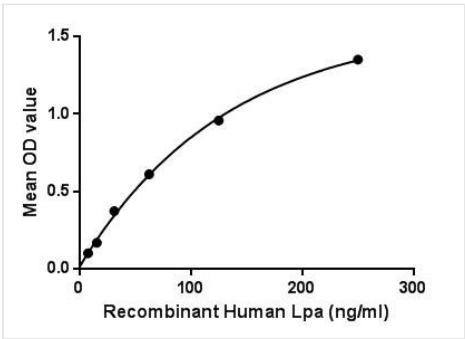
WB (Western Blot)
Sample: Recombinant Lpa, Human;Antibody: Rabbit Anti-Human Lpa Ab



Gene Sequencing
Gene Sequencing (extract)



SDS_PAGE
Sample: Active recombinant Lpa, Human



Bioactivity
Lipoprotein, a (Lpa) is a lipoprotein subclass. Lpa is assembled at the hepatocyte cell membrane surface, while other scenarios exist with regard to the location of assembly. It mainly exists in plasma. Lpa contributes to the process of atherogenesis. It also may enhance coagulation by inhibiting the function of tissue factor pathway inhibitor. Lpa carries cholesterol and binds atherogenic proinflammatory oxidized phospholipids as a preferential carrier of oxidized phospholipids in human plasma, which attract inflammatory cells to vessel walls and leads to smooth muscle cell proliferation. Moreover, Lpa also is hypothesized to be involved in wound healing and tissue repair, interacting with components of the vascular wall and extra cellular matrix. Besides, Fibronectin (FN) has been identified as an interactor of Lpa, thus a binding ELISA assay was conducted to detect the interaction of recombinant human Lpa and recombinant human FN. Briefly, Lpa were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to FN-coated microtiter wells and incubated for 2h at 37?. Wells were washed with PBST and incubated for 1h with anti-Lpa 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 50uL stop solution to the wells and read at 450nm immediately. The binding activity of Lpa and FN was shown in Figure 1, and this effect was in a dose dependent manner.

```
DC MFGNGKGYRG KKATTVTGTP CQEWAAQEPH
RHSTFIPGTN KHAGLEKNYC RNPQGDINGP HCYTMNPRKL FDYCDIPLCA
SSSFDCGKPQ VEPKKCPGSI VGGCVAPHPS WPMQVSLRTR FGKHFCGGTL
ISPEWLTAA HCLKKSSRPS SYKVILGAHQ EVNLESHVQE IEVSRLFLEP
TQADIALLLK SRPAVITDKV MPACLPSPDY MVTARTECYI TGWGETQGTG
GTGLLKEAQL LVIENEVCNH YKYICAEHLA RGTDSQCQDS GGPLVCFEKD
KYILQGVTSW GLGCARPNKP GYARVSRFV TWIEGMNR
```

Sequence

ADDITIONAL INFORMATION

Product Categories/Family for Lpa active protein	Metabolic pathway; Cardiovascular biology; Hepatology
--	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	119567981
-----------	-----------

NCBI GeneID	4018
UniProt Accession #	P08519
Molecular Weight	Predicted Molecular Mass: 39.1kDa Accurate Molecular Mass: 39kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	lipoprotein, Lp(a)
NCBI Official Synonym Full Names	lipoprotein(a)
NCBI Official Symbol	LPA
NCBI Official Synonym Symbols	LP; AK38; APOA
NCBI Protein Information	apolipoprotein(a)
UniProt Protein Name	Apolipoprotein(a)
UniProt Gene Name	LPA
UniProt Synonym Gene Names	Apo(a); Lp(a)
UniProt Entry Name	APOA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/e-coli-lpa-homo-sapiens-human-active-protein/lipoprotein-a/150102>