

Asporin (ASPN) Active Protein | ASPN active protein

Active Asporin (ASPN)

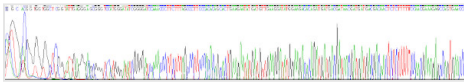
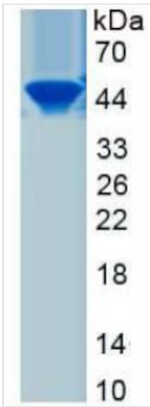
CATALOG # AAA21143	HOST E. coli	REACTIVITY Mus musculus (Mouse)	APPLICATIONS Cell Culture, Activity Assay
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PRODUCT SYNONYMS

Asporin (ASPN); Active Asporin (ASPN); PLAP1; SLRR1C; Periodontal ligament-associated protein 1; ASPN active protein

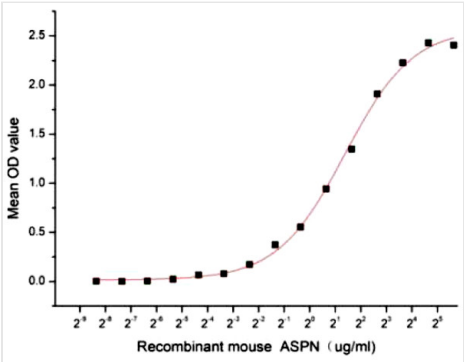
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Mus musculus (Mouse)
Purity/Purification	>90%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Applicable Applications for ASPN active protein	Cell Culture, Activity Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Prokaryotic expression.
Residues	Lys16~Lys373
Tags	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	8.8
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.



Gene Sequencing (Extract)

SDS-PAGE
Sample: Active recombinant ASPN, Mouse



Sequence Information

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KPFFS PSHTALKNNM LKDMEDTDDD DNDDDDNSLF
PTKEPVNPF PFDLFTCPF GCQCYSRVVH CSDLGLTSVP NNIPFDTRMV
DLQNNIKEI KENDFKGLTS LYALILNNK LTKIHPKTF TTKKLRLRYL
SHNQLSEIPL NLPKSLAELR IHDNKVKIK QDTFKGMNAL HVLEMSANPL
ENNGIEPGAF EGVTVFHIRI AEAKLTSPK GLPPTLLELH LDFNKISTVE
LEDLKRYREL QRLGLGNRI TDIENGTFAN IPRVREIHLE HNKLLKIPSG
LQELKYLQII FLHYNIAKV GVNDFCPTVP KMKKSLYSAL SLFNNPMKYW
EIQPATFRCV LGRMSVQLGN VGR
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Activity

Asporin (ASPN) is a protein belongs to a family of leucine-rich repeat (LRR) proteins implicated in cancer, osteoarthritis, and periodontal ligament mineralization. The protein negatively regulates chondrogenesis in the articular cartilage and periodontal ligament (PDL) differentiation, inhibits BMP2-induced cytodifferentiation of PDL cells and also nhibits the interaction between TGFβ1 and TGF-beta receptor type II in the presence of heparin/heparan sulfate in vitro. In addition Lumican (LUM) and ASPN can contribute to the fibrinogenesis of cardiac remodeling of ICM, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse ASPN and recombinant mouse LUM. Briefly, ASPN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ?l were then transferred to LUM-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-ASPN 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°C. Finally, add 50 uL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant mouse ASPN and recombinant mouse LUM was shown in Figure 1, the EC50 for this effect is 2.6 ug/mL.

ADDITIONAL INFORMATION

Product Categories/Family for ASPN active protein	Infection immunity; Bone metabolism; Rheumatology; Autoimmunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	289177082
NCBI GeneID	66695
NCBI Accession #	NP_001165952.1
NCBI GenBank Nucleotide #	NM_001172481.1
UniProt Accession #	Q99MQ4

Molecular Weight	Predicted Molecular Mass: 44.6kDa Accurate Molecular Mass: 45kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	asporin preproprotein
NCBI Official Synonym Full Names	asporin
NCBI Official Symbol	Aspn
NCBI Official Synonym Symbols	Plap1; Slrr1c; AA986886; 4631401G09Rik
NCBI Protein Information	asporin
UniProt Protein Name	Asporin
UniProt Gene Name	Aspn
UniProt Synonym Gene Names	PLAP-1
UniProt Entry Name	ASPN_MOUSE

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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-mouse-mus-musculus-active-protein/asporin-aspn/21143>