



Recombinant Human Asporin (ASPN)

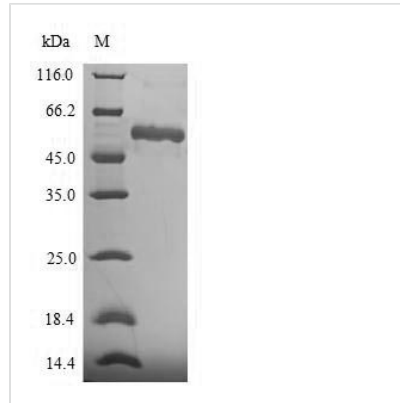
Product Code	CSB-EP002230HU
Relevance	Negatively regulates periodontal ligament (PDL) differentiation and mineralization to ensure that the PDL is not ossified and to maintain homeostasis of the tooth-supporting system. Inhibits BMP2-induced cytodifferentiation of PDL cells by preventing its binding to BMPR1B/BMP type-1B receptor, resulting in inhibition of BMP-dependent activation of SMAD proteins (By similarity). Critical regulator of TGF-beta in articular cartilage and plays an essential role in cartilage homeostasis and osteoarthritis (OA) pathogenesis. Negatively regulates chondrogenesis in the articular cartilage by blocking the TGF-beta/receptor interaction on the cell surface and inhibiting the canonical TGF-beta/Smad signal. Binds calcium and plays a role in osteoblast-driven collagen biomineralization activity.
Abbreviation	Recombinant Human ASPN protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9BXN1
Alias	Periodontal ligament-associated protein 1 Short name:PLAP-1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	DMEDTDDDDDDDDDDDDDDDEDNSLFPTREPRSHFFPFDLFPMPFCGQCYS RVVHCSDLGLTSVPTNIPFDTRMLDLQNNKIKEIKENDFKGLTSLYGLILNNK TKIHPKAFLTTKLRRLYLSHNQLSEIPLNLPKSLAELRIHENKVKKIQKDTFKGM NALHVLEMSANPLDNNGIEPGAFEGVTVFHIRIAEAKLTSVPKGLPPTLLELHLD YNKISTVELEDFKRYKELQRLGLGNNKITDIENGLANIPRVREIHLENNKLLKIP SGLPELKYLQIIFLHSNSIARVGVNDFCPTVPMKKSLSYSAISLFNPNPKYWEM QPATFRCVLSRMSVQLGNFGM
Research Area	Signal Transduction
Source	E.coli
Target Names	ASPN
Protein Names	Recommended name: Asporin Alternative name(s): Periodontal ligament-associated protein 1 Short name= PLAP-1
Expression Region	33-380aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged



Mol. Weight 55.7kDa

Protein Length Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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