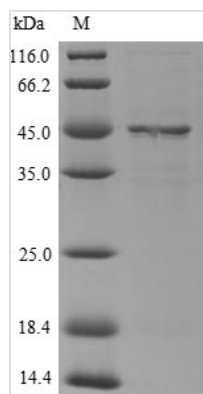




Recombinant Mouse Serine protease inhibitor A3N (Serpina3n)

Product Code	CSB-YP835578MOb0
Relevance	The single human alpha1-antichymotrypsin gene (SERPINA3) is represented by a cluster of 14 individual murine paralogs.
Abbreviation	Recombinant Mouse Serpina3n 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.	Q91WP6
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	FPDGTLGMDAAVQEDHDNGTQLDSLTLASINTDFAFSLYKELVLKNPDKNIVFS PLSISAALAVMSLGAKGNTLEEILEGLKFNLTTETSEADIHQQGFHLLQRLNQPK DQVQISTGSALFIEKRQQILTEFQEKAKTLYQAEAFADFQQPRQAKKLINDYV RKQTQGMIELVSDLDKRTLMLVLVNYIYFKAKWKVPFDPLDTFKSEFYAGKRR PVIVPMMSMEDLTTPYFRDEELSCVVELKYTGNASALFILPDQGRMQQVEAS LQPETLRKWKNSLKPRMIDELHLPKFSISTDYSLEDVLSKLGIREVFSTQADLSA ITGTKDLRVSQVVHKAVLDVAETGTEAAAATGVKFPMSAKLYPLTVYFNRPFLL IMIFDTETEIAPFIAKIANPK
Research Area	Others
Source	Yeast
Target Names	Serpina3n
Protein Names	Spi2
Expression Region	21-418aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	47.3 kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

The expression vector recombined with the recombinant DNA was transfected into the yeast cells for expression. The recombinant DNA resulted from the fusion of the gene coding for the 21-418aa of the mouse Serpina3n protein and the N-terminal 10xHis tag gene. The product was purified and isolated to get the recombinant mouse Serpina3n protein with N-terminal 10xHis tag. This recombinant Serpina3n protein's purity reaches up to 85%. Under SDS-PAGE condition, this recombinant Serpina3n protein showed a band with a molecular weight of about 45 kDa on the gel.

Serpina3n is a serine protease inhibitor and belongs serpin family which is the largest protease inhibitor family. Serpina3n is a recently identified novel serine protease inhibitor, α 1-antichymotrypsin-like protein, from EB22, a murine chondrocytic cell line. This protein is expressed at high levels in brain, heart, liver, lung, spleen, testis and thymus, and at low levels in bone marrow, kidney and skeletal muscle. The function of this protein is still unknown. A study has reported that mice lacking SerpinA3N developed more neuropathic mechanical allodynia than wild-type (WT) mice, and exogenous delivery of SerpinA3N attenuated mechanical allodynia in WT mice. Additionally, another study found Serpina3n as the most female osteoblast-dominant gene. This study demonstrated that Serpina3n exerts a suppression of the osteoblast phenotypes such as Col1a1 expression and ALP activity in differentiated osteoblasts, which might partly explain sex differences of the osteoblast phenotypes in mice.

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

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.