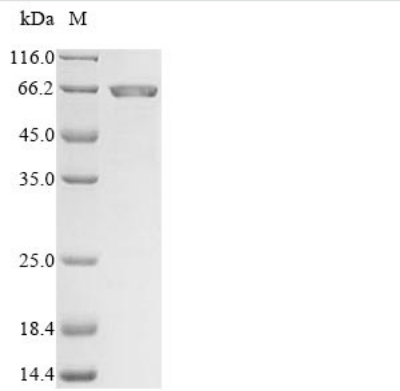
Recombinant Mouse Matrix metalloproteinase-24 (Mmp24), partial

Product Code	CSB-EP879497MO
Relevance	Metalloprotease that mediates cleavage of N-cadherin (CDH2) and acts as a regulator of neuro-immune interactions and neural stem cell quiescence. Involved in cell-cell interactions between nociceptive neurites and mast cells, possibly by mediating cleavage of CDH2, thereby acting as a mediator of peripheral thermal nociception and inflammatory hyperalgesia. Key regulator of neural stem cells quiescence by mediating cleavage of CDH2, affecting CDH2-mediated anchorage of neural stem cells to ependymocytes in the adult subependymal zone, leading to modulate their quiescence. May play a role in axonal growth. Able to activate progelatinase A. May also be a proteoglycanase involved in degradation of proteoglycans, such as dermatan sulfate and chondroitin sulfate proteoglycans. Cleaves partially fibronectin, but not collagen type I, nor laminin.
Abbreviation	Recombinant Mouse Mmp24 protein, partial
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.	Q9R0S2
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	AGKPAGADAPFAGQNWLKSYGYLLPYESRASALHSGKALQSAVSTMQQFYGI PVTGVLDQTTIEWMKKPRCGVPDHPHLSRRRRNKRYALTGQKWRQKHITYSI HNYTPKVGELDTRKAIRQAFDVWQKVTPLTFEEVPYHEIKSDRKEADIMIFFAS GFHGDSSPFDGEGGFLAHAYFPGPGIGGDTHFDSDEPWTLGNANHDGNDLF LVAVHELGHALGLEHSNDPSAIMAPFYQYMETHNFKLPQDDLQGIQKIYGPPA EPLEPTRPLPTLPVRRIHSPSERKHERHPRPPRPPLGDRPSTPGAKPNICDGN FNTVALFRGEMFVFKDRWFWRLRNNRVQEGYPMQIEQFWKGLPARIDAAYE RADGRFVFFKGDKYWVFKEVTVEPGYPHSLGELGSCLPREGIDTALRWEPVG KTYFFKGERYWRYSEERRATDPGYPKPITVWKGIPQAPQGAFISKEGYYTYFY KGRDYWKFDNQKLSVEPGYPRNILRDWMGCKQKEVERRKERRLPQDDVDIM VTIDDVPGSVNA
Research Area	Cell Biology
Source	E.coli
Target Names	Mmp24
Protein Names	Matrix metalloproteinase-21 Short name: MMP-21 Membrane-type matrix metalloproteinase 5 Short name: MT-MMP 5 Short name: MTMMP5 Membrane-type-5 matrix metalloproteinase Short name: MT5-MMP Short name: MT5MMP

	Mmp21, Mt5mmp
Expression Region	42-575aa
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 and C-terminal Myc-tagged
Mol. Weight	66.4 kDa
Protein Length	Extracellular Domain
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Mouse Mmp24 covers amino acids 42-575. This Mmp24 protein is expected to have a theoretical molecular weight of 66.4 kDa. This Mmp24 protein is produced using e.coli expression system. The N-terminal 10xHis tag and C-terminal Myc tag was fused into the coding gene segment of Mmp24, making it easier to detect and purify the Mmp24 recombinant protein in the later stages of expression and purification.

The mouse matrix metalloproteinase-24 (Mmp24) is an enzyme that belongs to the matrix metalloproteinase family, involved in extracellular matrix remodeling. Mmp24, as a metalloproteinase, is likely to contribute to tissue homeostasis and remodeling by cleaving various extracellular matrix components. Research areas involving Mmp24 span investigations into tissue development, wound healing, and pathological processes such as cancer invasion and metastasis. Understanding Mmp24's role in these contexts provides insights into its potential as a therapeutic target for conditions involving dysregulated extracellular matrix dynamics and may contribute to the development of treatments for diseases associated with abnormal tissue remodeling.

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.