

Recombinant Rat 72KDA type IV collagenase(Mmp2)

Catalog No: #AP70549

Package Size: #AP70549-1 20ug #AP70549-2 100ug #AP70549-3 1mg

Description

Product Name	Recombinant Rat 72KDA type IV collagenase(Mmp2)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:110-662aaSequence Info:Full Length
Other Names	72KDA gelatinaseGelatinase AMatrix metalloproteinase-2 ;MMP-2
Accession No.	P33436
Calculated MW	78.1 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	YNFFPRKPKWDKNQITYRIIGYTPDLDPETVDDAFARALKVWSDVTPLRFSRIHDGEADIMINFRWEHGDGY PFDGKDGLLAHAFAPGTGVGGDSHFDDDELWTLGEGQVVRVKYGNADGEYCKFPFLFNGREYSSCTDTGRS DGFLWCSTTYNFEKDGKYGFCPHEALFTMGNGDGGQCKFPFRFQGTSYNSCTTEGRTDGYRWCGTTEDY DRDKKYGFCPETAMSTVGGNSEGAPCVFPFTFLGNKYESCTSAGRSDGKVWCATTTNYDDDRKWGFCPDQ GYSLFLVAAHEFGHAMGLEHSQDPGALMAPIYTYTKNFRLSNDDIKGIQELYGPSPDADTDTGTGPTPTLGPV TPEICKQDIVFDGIAQIRGEIFFFKDRFIWRTVTPRDKPTGPLLVATFWPELPEKIDAVYEAPQEEKAVFFAGNEY WVYSASTLERGYPKPLTSLGLPPDVQQVDAAFNWSKNKTYIFSGDKFWRYNEVKKKMDPGFPKLIADSWNA IPDNLDVAVDLQGGGHSYFFKGAYYKLENQSLKSVKFGSIKSDWLGC
Formulation	Tris-based buffer50% glycerol
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.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Ubiquitous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading Extracellular domain matrix proteins, can also act on several nonmatrix proteins such as big endothelial 1 and beta-type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly-|-Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Involved in the formation of the fibrovascular tissues .PEX, the C-terminal non-catalytic fragment of MMP2, possesses anti-angiogenic and anti-tumor properties and inhibits cell migration and cell adhesion to FGF2 and vitronectin. Ligand for integrin alpha-v,beta3 on the surface of blood vessels .

References

Homology cloning of rat 72KDA type IV collagenase cytokine and second-messenger inducibility in glomerular mesangial cells.Marti H.P., McNeil L., Davies M., Martin J., Lovett D.H.Biochem. J. 291:441-446(1993)Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.