9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

32-6850: MMP9 Human, HEK

Alternative Name : Matrix metalloproteinase-9, MMP-9, 92 kDa gelatinase, Gelatinase B, GELB, MMP9, CLG4B.

Description

Source: HEK293 Cells.
Filtered White lyophilized (freeze-dried) powder.
Matrix metalloproteinases are a family of zinc and calcium-dependent endopeptidases that break down extracellular matrix proteins. The MMP9 is secreted as a 92kDa zymogen. Cleavage of ProMMP-9 results in the active enzyme, having a molecular weight of approximately 82kDa. MMP9 is composed of the following domains: a gelatin-binding domain consisting of three fibronectin type II units, a catalytic domain containing the zinc-binding site, a proline-rich type V collagen-homologous domain and a hemopexin-like domain. MMP9 is produced by the several cell types: monocytes, macrophages, neutrophils, keratinocytes, fibroblasts, osteoclasts and endothelial cells. MMP9 is involved in inflammatory responses, tissue remodeling, wound healing, tumor growth and metastasis. MMP9 may also play an important part in local proteolysis of the extracellular matrix and in leukocyte migration, as well as in bone osteoclastic resorption. MMP9 cleaves type IV and type V collagens into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. MMP9 can also degrade fibronectin but not laminin or Pz-peptide.MMP9 defects may be a cause of susceptibility to intervertebral disc disease (IDD), also known as lumbar disk herniation (LDH).
MMP9 Human Recombinant is a single, glycosylated polypeptide chain containing 694 amino acids (20-707a.a) and having a molecular mass of 77.2kDa (calculated). MMP9 is fused to a 6 a.a His tag at C-terminal.

Product Info

Amount :	2 µg / 10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	MMP9 filtered (0.4 µm) and lyophilized from 0.5mg/ml solution in PBS, pH7.5 and 5% (w/v) Threalose. It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely.
Storage condition :	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.
Amino Acid :	APRQRQSTLVLFPGDLRTNLTDRQLAEEYLYRYGYTRVAEMRGESKSLGPALLLLQKQLSLPET GELDSATLKAMRTPRCGVPDLGRFQTFEGDLKWHHHNITYWIQNYSEDLPRAVIDDAFARAF ALWSAVTPLTFTRVYSRDADIVIQFGVAEHGDGYPFDGKDGLLAHAFPPGPGIQGDAHFDDD ELWSLGKGVVVPTRFGNADGAACHFPFIFEGRSYSACTTDGRSDGLPWCSTTANYDTDDRFG FCPSERLYTRDGNADGKPCQFPFIFQGQSYSACTTDGRSDGYRWCATTANYDRDKLFGFCPTR ADSTVMGGNSAGELCVFPFTFLGKEYSTCTSEGRGDGRLWCATTSNFDSDKKWGFCPDQ GYSLFLVAAHEFGHALGLDHSSVPEALMYPMYRFTEGPPLHKDDVNGIRHLYGPRPEPEPRPPTTTT PQPTAPPTVCPTGPPTVHPSERPTAGPTGPPSAGPTGPPTAGPSTATTVPLSPVDDACNVNIFDAIAE IGNQLYLFKDGKYWRFSEGRGSRPQGPFLIADKWPALPRKLDSVFEERLSKKLFFFSGRQVWVYTGAS VLGPRRLDKLGLGADVAQVTGALRSGRGKMLLFSGRRLWRFDVKAQMVDPRSASEVDRMFPGVPLD THDVFQYREKAYFCQDRFYWRVSSRSELNQVDQVGYVTYDILQCPEDHHHHHH.