Datasheet for ABIN2726159

MMP2 Protein (Transcript Variant 1)

1 Image

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Overview

Quantity:	10 µg
Target:	MMP2
Protein Characteristics:	Transcript Variant 1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Functional Studies (Func), Antibody Production (AbP), Standard (STD), Protein Interaction (PI)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	• Recombinant human MMP-2 (transcript variant 1) protein expressed in E. coli. • Produced with end-sequenced ORF clone • Tested for bioactivity.
Purity:	> 90 % as determined by SDS-PAGE and Coomassie blue staining
Endotoxin Level:	Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).
Biological Activity Comment:	MMP-2 activity was measured by its ability to cleave a chromogenic peptide MMP-2 substrate at room temperature. At an MMP-2 concentration of 2.5 ug/mL, 50% cleavage was achieved at an incubation time of approximately 25 minutes.

Target Details

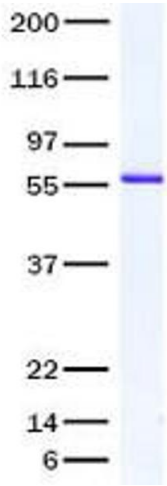
Target:	MMP2
Alternative Name:	Mmp-2 (MMP2 Products)
Background:	This gene is a member of the matrix metalloproteinase (MMP) gene family, that are zinc-dependent enzymes capable of cleaving components of the extracellular matrix and molecules involved in signal transduction. The protein encoded by this gene is a gelatinase A, type IV collagenase, that contains three fibronectin type II repeats in its catalytic site that allow binding of denatured type IV and V collagen and elastin. Unlike most MMP family members, activation of this protein can occur on the cell membrane. This enzyme can be activated extracellularly by proteases, or, intracellulary by its S-glutathiolation with no requirement for proteolytical removal of the pro-domain. This protein is thought to be involved in multiple pathways including roles in the nervous system, endometrial menstrual breakdown, regulation of vascularization, and metastasis. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.
Molecular Weight:	62 kDa
NCBI Accession:	NP_004521
Pathways:	Activation of Innate immune Response

Application Details

Application Notes:	Recombinant human proteins can be used for: Native antigens for optimized antibody production Positive controls in ELISA and other antibody assays Protein-protein interaction In vitro biochemical assays and cell-based functional assays
Restrictions:	For Research Use only

Handling

Buffer:	Lyophilized from a 0.2 μM filtered solution of 20 mM phosphate buffer,100 mM NaCl, pH 7.2
Handling Advice:	Resuspend the protein in the desired concentration in proper buffer
Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.



Western Blotting

Image 1. Validation with Western Blot