Human RASI-1 / MMP19 Protein

Catalog Number: **13912-HNAE**

General Information

Gene Name Synonym:

MMP18; RASI-1

Protein Construction:

A DNA sequence encoding the catalytic domain of human MMP19 (Q99542-1) (Leu101-Gly256) was expressed, with a N-terminal Met.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human MMP19 consists of 157 amino acids and predicts a molecular mass of 17.6 KDa. It migrates as an approximately 18 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 100mM NaCl, 0.5M Arg, 5mM CaCl2, 0.03% Brij35, 50uM ZnCl2, 1/0.1mM GSH/GSSG, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

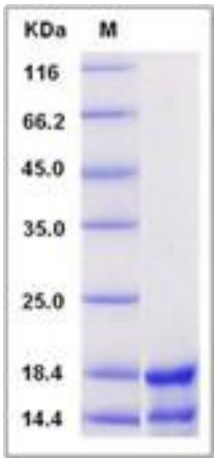
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

MMP19, also known as RASI-1, is a member of the peptidase M10A family. It contains 4 hemopexin-like domains and is expressed in mammary gland, placenta, lung, pancreas, ovary, small intestine, spleen, thymus, prostate, testis colon, heart and blood vessel walls. It is a matrix metalloproteinase (MMP). Proteins of the MMP family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. MMP19 may play a role in pathological processes participating in rheumatoid arthritis (RA)-associated joint tissue destruction. Autoantigen anti-MMP19 are frequent in RA patients.

References

1.Cossins J., *et al.*,(1996), Identification of MMP-18, a putative novel human matrix metalloproteinase. Biochem. Biophys. Res. Commun. 228:494-498. 2.Pendas A.M., *et al.*, (1997), Identification and characterization of a novel human matrix metalloproteinase with unique structural characteristics, chromosomal location and tissue distribution.J. Biol. Chem. 272:4281-4286. 3.Kolb C., *et al.*,(1997), The matrix metalloproteinase RASI-1 is expressed in synovial blood vessels of a rheumatoid arthritis patient.Immunol. Lett. 57:83-88.