abcam

Product datasheet

Recombinant human MMP13 protein ab134452

1 References 画像数 1

製品の詳細

製品名 Recombinant human MMP13 protein

生理活性 The specific activity is >0.5 U/mg. 1 U is the activity that hydrolyzes 1 mmol peptide (7-

methoxycoumarin-4-yl) acetyl-Pro-Leu-Gly-Leu-(3-[2, 4-dinitrophenyl]-L-2, 3-diamino-propionyl)-

Ala-Arg-NH2 (Mca-Pro-Leu-Gly-Leu-Dpa-Ala-Arg) within 1 min.

精製度 > 90 % SDS-PAGE.

発現系 Escherichia coli

アクセッション番号 P45452

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

配列 YNVFPRTLKWSKMNLTYRIVNYTPDMTHSEVEKAFKKAFKVW

SDVTPLNF

TRLHDGIADIMISFGIKEHGDFYPFDGPSGLLAHAFPPGPNY

GGDAHFDD

DETWTSSSKGYNLFLVAAHEFGHSLGLDHSKDPGALMFPIYT

YTGKSHFM LPDDDVQGIQSLYGPGDEDPN

予測される分子量 19 kDa

領域 104 to 274

特性

Our Abpromise guarantee covers the use of ab134452 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション SDS-PAGE

Functional Studies

製品の状態 Liquid

前処理および保存

保存方法および安定性

Shipped on dry ice. Upon delivery aliquot and store at -80 $^{\circ}$ C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.05% Calcium chloride, 0.79% Tris HCI, 0.88% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

関連情報

機能

組織特異性

関連疾患

Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.

Seems to be specific to breast carcinomas.

Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia Missouri type (SEMD-MO) [MIM:602111]. A bone disease characterized by moderate to severe metaphyseal changes, mild epiphyseal involvement, rhizomelic shortening of the lower limbs with bowing of the femora and/or tibiae, coxa vara, genu varum and pear-shaped vertebrae in childhood. Epimetaphyseal changes improve with age.

Defects in MMP13 are the cause of metaphyseal anadysplasia type 1 (MANDP1) [MIM:602111]. Metaphyseal anadysplasia consists of an abnormal bone development characterized by severe skeletal changes that, in contrast with the progressive course of most other skeletal dysplasias, resolve spontaneously with age. Clinical characteristics are evident from the first months of life and include slight shortness of stature and a mild varus deformity of the legs. Patients attain a normal stature in adolescence and show improvement or complete resolution of varus deformity of the legs and rhizomelic micromelia.

配列類似性

ドメイン

細胞内局在

Belongs to the peptidase M10A family.

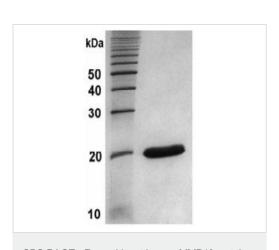
Contains 4 hemopexin-like domains.

The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-

peptide release activates the enzyme.

Secreted > extracellular space > extracellular matrix.

画像



SDS-PAGE - Recombinant human MMP13 protein (ab134452)

SDS-PAGE analysis of ab134452 (4µg).

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