Recombinant Human Collagenase 3(MMP13)

Catalog No: #AP70547

Package Size: #AP70547-1 20ug #AP70547-2 100ug #AP70547-3 1mg

Signalway Antibody
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Description

Product Name	Recombinant Human Collagenase 3(MMP13)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:104-471aaSequence Info:Full Length
Other Names	Matrix metalloproteinase-13 ;MMP-13
Accession No.	P45452
Calculated MW	58.3 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	YNVFPRTLKWSKMNLTYRIVNYTPDMTHSEVEKAFKKAFKVWSDVTPLNFTRLHDGIADIMISFGIKEHGDFYP FDGPSGLLAHAFPPGPNYGGDAHFDDDETWTSSSKGYNLFLVAAHEFGHSLGLDHSKDPGALMFPIYTYTGK SHFMLPDDDVQGIQSLYGPGDEDPNPKHPKTPDKCDPSLSLDAITSLRGETMIFKDRFFWRLHPQQVDAELFL TKSFWPELPNRIDAAYEHPSHDLIFIFRGRKFWALNGYDILEGYPKKISELGLPKEVKKISAAVHFEDTGKTLLFS GNQVWRYDDTNHIMDKDYPRLIEEDFPGIGDKVDAVYEKNGYIYFFNGPIQFEYSIWSNRIVRVMPANSILWC
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

Plays a role in the degradation of Extracellular domain matrix proteins including fibrillar collagen, fibronectin, TNC and ACAN. Cleaves triple helical collagens, including type I, type II and type III collagen, but has the highest activity with soluble type II collagen. Can also degrade collagen type IV, type XIV and type X. May also function by activating or degrading key regulatory proteins, such as TGFB1 and CTGF. Plays a role in wound healing, tissue rodeling, cartilage degradation, bone development, bone mineralization and ossification. Required for normal bryonic bone development and ossification. Plays a role in the healing of bone fractures via endochondral ossification. Plays a role in wound healing, probably by a mechanism that involves proteolytic activation of TGFB1 and degradation of CTGF. Plays a role in keratinocyte migration during wound healing. May play a role in cell migration and in tumor cell invasion.

References

A secreted tyrosine kinase acts in the Extracellular domain environment.Bordoli M.R., Yum J., Breitkopf S.B., Thon J.N., Italiano J.E. Jr., Xiao J., Worby C., Wong S.K., Lin G., Edenius M., Keller T.L., Asara J.M., Dixon J.E., Yeo C.Y., Whitman M.Cell 158:1033-1044(2014)Research Topic:Developmental Biology