Recombinant rat Metalloproteinase inhibitor 1

Catalog No: #AP72331



Package Size: #AP72331-1 20ug #AP72331-2 100ug #AP72331-3 1mg

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Descr	iption
Product	Name

Product Name	Recombinant rat Metalloproteinase inhibitor 1
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:24-217aaSequence Info:Full Length
Other Names	Tissue inhibitor of metalloproteinases 1 ;TIMP-1
Accession No.	P30120
Uniprot	P30120
GeneID	116510;
Calculated MW	25.5 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	${\tt CSCAPTHPQTAFCNSDLVIRAKFMGSPEIIETTLYQRYEIKMTKMLKGFDAVGNATGFRFAYTPAMESLCGYVH}$
	KSQNRSEEFLIAGRLRNGNLHITACSFLVPWHNLSPAQQKAFVKTYSAGCGVCTVFPCSAIPCKLESDSHCLW
	TDQILMGSEKGYQSDHFACLPRNPDLCTWQYLGVSMTRSLPLAKAEA
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

Metalloproteinase inhibitor that functions by forming one to one complexes with target metalloproteinases, such as collagenases, and irreversibly inactivates the by binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14. Also functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling. Also stimulates steroidogenesis by Leydig and ovarian granuloma cells; procathepsin L is required for maximal activity.

References

Purification and sequence analysis of two rat tissue inhibitors of metalloproteinases.Roswit W.T., McCourt D.W., Partridge N.C., Jeffrey J.J.Arch. Biochem. Biophys. 292:402-410(1992)Research Topic:Others

Note: This product is for in vitro research use only