

32-3294: Batroxobin Recombinant Protein

Alternative Name Thrombin-like enzyme batroxobin, EC 3.4.21.74, BX, Bothrops atrox serine proteinase, Venombin-A, Defibrinase, Reptilase, Batroxobin.

Description

Source : Pichia Pastoris. The Batroxobin Recombinant Protein, produced in yeast, is a single, glycosylated polypeptide chain containing 231 amino acids and having an Mw of approximately 28-33 kDa. Batroxobin is a serine protease that reduces fibrinogen levels and is originally extracted from snake venom of Bothrops Arox. Batroxobin is used in defibrinogenation and thrombolysis and also has an effect on c-fos gene and growth factor. Batroxobin can efficiently restrain proliferation of VSMCs, by blocking the release and uptake of Ca^{2+} , thus influencing $[Ca^{2+}]_i$. Batroxobin is a single chain glycopeptide with a molecular mass of 43kDa on SDS-PAGE gel and its pI-6.6. Batroxobin converts fibrinogen to fibrin through the restricted release of fibrinopeptide-A from fibrinogen to promote blood to clot. Unlike thrombin, it is not affected by heparin and hirudin.

Product Info

Amount :	10 μ g
Purification :	Greater than 97.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content :	The Batroxobin protein was lyophilized from a concentrated (1mg/ml) solution containing 20mM sodium acetate buffer, pH 7.4.
Storage condition :	Batroxobin although stable at room temperature for 3 weeks, should be stored below $-18^{\circ}C$. Upon reconstitution Batroxobin should be stored at $4^{\circ}C$ between 2-7 days and for future use below $-18^{\circ}C$. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	VIGGDECDIN EHPFLAFMYI SPRYFCGRTL INQEWLTAH HCNRRFMRIH LGKHAGSVAN YDEVVRYPKK KFCIPNKKKN VITDKDIMLI RLDRPVKNSE HIAPLSLPSN PPSVGSVCRI MGWGAIITSE DTYPDVPKCA NINLFNNTVC REAYNGLPAK TLCAGVLQGG IDTCGGDSGG PLICNGQFQG ILSWGSDFCA EPRKPAFYTK VFDYLPWIKS IAGNKTATC P.

Application Note

It is recommended to reconstitute the lyophilized Batroxobin in sterile 18M-cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. Batroxobin's biological activity was found to be of no less than 500KU/mg. (Klobusitzky Unit). One KU is defined as the amount of enzyme which coagulates standard human plasma incubated at $37^{\circ}C$ in vitro within 60 ± 20 seconds.

