

Avidin Biotin

Modified Affinity Purified Avidin
NTP0065

Product Overview

Name Avidin Biotin

Description

Modified Affinity Purified Avidin

Accession (Primary) [P02701](#)

Synonyms

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

Introduction

Batroxobin is a serin protease that reduces fibrinogen levels and is originally extracted from snake venom of Bothrops Atrox. 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.

Source

Pichia Pastoris.

Physical Appearance

Sterile Filtered white lyophilized powder.

Formulation

The Batroxobin protein was lyophilized from a concentrated (1mg/ml) solution containing 20mM sodium acetate buffer, pH 7.4.

Stability

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.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

VIGGDECDIN EHPFLAFMY SPRYFCGMTL INQEWVLTAA HCNRRFMRIH LGKHAGSVAN YDEVVRYPK
KFICPNKKKN VITDKDIMLI RLDRPVKNSE HIAPLSLPSN PPSVGSVCRI MGWGAIITSE DTYPDVPHCA
NINLFNNTVC REAYNGLPAK TLCAGVLQGG IDTCGGDSGG PLICNGQFQG ILSWGSDPCA EPRKPAFYTK
VFDYLPWIS IIAGNKTATC P.

Biological Activity

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°C in vitro within 60 ± 20 seconds.

Solubility

It is recommended to reconstitute the lyophilized Batroxobin in sterile 18M-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

Title :Impaired clot retraction in factor XIII A subunit-deficient mice Supplemental materials for: Kasahara et al
Publication :Published online before print December 8, 2009, doi: 10.1182/blood-2009-06-227645 Blood December 8, 2009
Link : <http://bloodjournal.hematologylibrary.org/content/115/6/1277/suppl/DC1>

Precautions

Avidin Biotin is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: ([P02701](#))