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Chapter 6 Functional characterization of purified Nk-3FTx

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List of abbreviations

Single letter and three letter abbreviations of amino acid residues were followed as per the recommendations of the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature. Other abbreviations are listed below.

Chemicals and reagents

ACN	Acetonitrile
AgNO ₃	Silver nitrate
Amp	Ampicillin
BCIP/NBT	5-bromo-4-chloro-3-indolyl-phosphate/ nitro blue tetrazolium
BH	Bupivacaine hydrochloride
BPTI	Bovine pancreatic trypsin inhibitor
BSA	Bovine serum albumin
Ca^{2+}	Calcium ion
$CaCl_2$	Calcium chloride
CO_2	Carbon dioxide
DTNB	5, 5-dithio-bis-(2-nitrobenzoic acid)
DTT	Di-thio threitol
EDTA	Ethylenediaminetetraacetic acid
HCl	Hydrochloric acid
IAA	Indole 3 acetic acid
LB	Luria-bertani
NaCl	Sodium chloride
NaOH	Sodium hydroxide
OsO_4	Osmium tertoxide
PBS	Phosphate buffer saline
PTH	Phenylthiohydantion
QH	Quinine hydrochloride
SDS	Sodium dodecyl sulfate
TBST	Tris buffer saline Tween 20
TFA	Trifluoroacetic acid

Units and measurements

°C	Degree Celcius
μg	Micro gram
μl	Micro liter
μm	Micro meter
μΜ	Micro molar
Å	Angstrom
amu	Atomic mass units
cm	Centi meter
CPS	Counts per second
Da	Dalton
kDa	Kilo Dalton
kg	Kilo gram
g	Gram
hr	Hour

т	Liture
L	Litre
М	Molar
mg	Milli gram
min	Minute
ml	Milli liter
mM	Milli molar
Mr	Relative molecular weight
ms	Millisecond
mV	Millivolt
MW	Molecular weight
m/z	Mass-to-charge ratio
n	Number of experiments
nH	Hill coefficient
nmol	Nano molar
nm	Nano meter
OD	Optical density
rpm	Revolutions per minute
S	Second
SD	Standard deviation
U/l	Unit/litre
V	Volt
Others	
3FTx	Three finger toxin
AChBP	Three finger toxin
	Acetylcholine binding protein
AChE	Acetylcholinesterase
ACT	Activated clotting time
APTT	Activated partial thromboplastin time
ADP	Adenosine di-phosphate
ATP	Adenosine tri-phosphate
ASV	Anti snake venom
ASSET	Accelerated segment switch in exons to alter targeting
BLAST	Basic local alignment search tool
BNC	Bayonet Neill–Concelman
cAMP	Cyclic monophosphate
CAP	Compound action potential
CD	Circular dichroism
cDNA	Complementary DNA
CNS	Central nervous system
CK	Creatine kinase
CRISP	Cysteine rich secretory proteins
CFT	Clot formation time
CT	Clotting time
C-terminal	Carboxy terminal
CTX	Cardiotoxin
CVD	Cardiovascular disease
DNA	Deoxyribonucleic acid
EBI	European bioinformatics institute
ESI-MS	Electrospray ionization-mass spectrometry

G Proteins	GTP binding proteins
GPCR	G protein coupled receptor
HEK 293	Human embryonic kidney cells 293
HPLC	High performance liquid chromatography
IC ₅₀	inhibitory concentration 50%
i.d.	intra dermal
i.m.	intra muscular
i.p.	intra peritoneal
IUCN	International union for conservation of nature
K^+	Potassium ion
KTX	Kaouthiotoxin
LAAO	L-amino acid oxidase
L6	Rat skeletal muscle cells
LC	Least concerned
LC/MS	Liquid chromatography/mass spectrometry
LC/MS/MS	Liquid chromatography/mass spectrometry/mass spectrometry
LD ₅₀	Lethal dose 50 %
LDH	Lactate dehydrogenase
LNTX	Long neurotoxin
mAChR	Muscarinic acetylcholine receptor
MALDI	Matrix assisted laser desorption ionization
MCF	Maximum clot firmness
MED	Minimum edema dose
MHD	Minimum hemorrhagic dose
MT	Muscarinic toxin
MTLP	Muscarinic toxin like protein
MTT	3-(4,5-Dimethylthiazol-2-yl)-2,5-Diphenyltetrazolium
bromide	
nAChR	Nicotinic acetylcholine receptor
NAD	Nicotinamide adenine dinucleotide
NADH	Nicotinamide adenine dinucleotide reduced
NCBI	National center for biotechnology information
NCV	Nerve conduction velocity
NCT	Normal clotting time
NGF	Nerve growth factor
NMR	Nuclear magnetic resonance
N-terminal	Amino terminal
PCr	Phosphocreatine
PCR	Polymerase chain reaction
PDB	Protein data bank
PLA ₂	Phospholipase A_2
PNS	Peripheral nervous system
RBC	Red blood cell
RGD	Arg-Gly-Asp tripeptide
RP-HPLC	Reverse phase high performance chromatography
PPP	Platelet poor plasma
PT	Prothrombin time
SEM	Scanning electron microscope
SDS-PAGE	Sodium dodecyl sulfate polyacrylamide gel electrophoresis
SNTX	Short neurotoxin
MITIII	

sPLA ₂	Secretory phospholipase A ₂
Snaclec	Snake venom lectin like proteins
SNAP	Compound sensory nerve action potential
SFAP	Sensory fibre action potential
SVMP	Snake venom metalloproteinase
TF	Tissue factor
TOF	Time of flight
UV	Ultra violet
WTX	Weak toxin
α	Alpha
β	Beta
γ	Gamma
κ	Карра
3	Epsilon