CPP, Cell-Penetrating Peptides

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Springer

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ISBN 978-981-13-8746-3 ISBN 978-981-13-8747-0 (eBook)
https://doi.org/10.1007/978-981-13-8747-0

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

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Abbreviations

Aa	Amino acid
Abz	2-Aminobenzoic acid
aCPP	Activatable cell-penetrating peptide
AD	Alzheimer's disease
Aib	α-Aminoisobutyric acid
ALA	5-Aminolevulinic acid
AMP	Antimicrobial peptides
APP	Amyloid precursor protein
ASO	Antisense oligonucleotide
ATTEMPTS	Antibody targeted triggered electrically modified prodrug type strategy
BBB	Blood-brain-barrier
BK	Bradykinin
bPrPp	Bovine prion protein
CaM	Calmodulin
Cas	CRISPR-associated protein systems
CatD	Cathepsin D
CD	Circular dichroism
CF	Carcoxyfluorescein
Chol	Cholesteryl
CLSM	Confocal laser scanning microscopy
CNS	Central nervous system
CPP	Cell-penetrating peptide
CRISPR	Clustered regularly interspaced short palindromic repeat
DDS	Drug delivery systems
DLS	Dynamic light scattering
DMD	Duchenne Muscular Dystrophy
DOX	Doxorubicin
DPC	Dodecylphosphocholine
DRBD	Double-stranded RNA-binding domain

EED	Endosomal escape domains
EGFR	Epidermal growth factor receptor
EM	Electron microscopy
EPR	Enhanced permeation and retention
ERT	Enzyme replacement therapy
FA	Folic acid
FAM	Arboxyfluorescein
FACS	Fluorescence activated cell sorting
FCS	Fluorescence correlation spectroscopy
FITC	Fluorescein isothiocyanate
Fl	Fluorescent label
FRET	Förster resonance energy transfer
GAGs	Glycosaminoglycans
GET	Glycosaminoglycan-binding enhanced transduction delivery system
GFP	Green fluorescent protein
GO	Graphene oxide
GPCR	G-protein coupled receptor
GUV	Giant unilamellar vesicles
HA	Haemagglutinin
hMSC	Human mesenchymal stem cell
HPLC	High performance liquid chromatography
HS	Heparan sulfate
HSC	Haematopoietic stem cell
Hsp70	Heat shock protein 70
HSPG	Heparan sulfate proteoglycan
IgG	Immunoglobulin G
iPS	Induced pluripotent stem cell
iRGD	Integrin-binding RGD motif
ITC	Isothermal titration calorimetry
JIP	JNK interacting protein
LF	Lactoferrin
LMWP	Low molecular weight protamine
LNA	Locked nucleic acid
LSP	Lysosomal sorting peptide
LUV	Large unilamellar vesicles
mAb	Monoclonal antibody
MAP	Membrane active peptide
MD	Molecular dynamics
MEND	Multifunctional envelope-type nanodevice
MHC	Major histocompatibility complex
MION	Magnetic iron oxide nanoparticles
miRNA	MicroRNA
MLV	Multilamellar vesicles
MMP	Matrix metalloprotease
MPP	Mitochondria-penetrating peptides

MRI	Magnetic resonance imaging
MS	Mass-spectrometry
MSC	Mesenchymal stem cells
mt	Mitochondria
MTS	Mitochondrial targeting sequence
NLC	Nanostructured lipid carrier
NLS	Nuclear localisation signal
NMR	Nuclear magnetic resonance
NP	Nanoparticle
NRP-1	Neuropilin-1
ON	Oligonucleotide
OVA	Ovalbumin
PACAP	Pituitary adenylate-cyclase-activating polypeptide
pAntp	*Drosophila* homeoprotein Antennapedia derived peptide
pArg	Poly-arginine, pR
PC	Phosphatidylcholine
PCM	Primary cardiomyocyte-targeting peptide
pDNA	Plasmid DNA
PDT	Photodynamic therapy
PDZ	A 80–90 aa domain found in the signaling proteins
PEG	Poly-ethylene glycol
PEI	Polyethylenimine
Pen	Penetratin
PET	Positron-emission tomography
PF	PepFect
pHLIP	pH low insertion peptides
Pip	PNA internalising peptide
PK	Protein kinase
PLA	Poly-l-arginine
PLGA	Poly(dl-lactic acid-co-glycolic acid)
PLL	Poly-l-lysine (PLL)
PMO	Phosphorodiamidate morpholino oligomers
PNA	Peptide nucleic acid
POPC	1-palmitoyl-2-oleoyl-snglycero-3-phosphocholine
POPG	1-palmitoyl-2-oleoyl-sn-glycero-3-phosphoglycerol
PPI	Protein-protein interaction
PS	Phosphorothioate ON
PSC	Pluripotent stem cells
PSP	Photo-sensitive peptide
PTD	Protein/peptide transduction domains
PTX	Paclitaxel (PTX)
QD	Quantum dots
R8	Octa-arginine
Rh	Rhodamine
ri	Retro-inverso

Rn	Poly-arginine
SAP	Sweet arrow peptide
SAR	Structure-activity studies
SCARA	Class A scavenger receptors
SCO	Splice correcting ON
scFv	Single chain variable fragment
SDS	Sodium dodecyl sulfate
SEM	Scanning electron microscope
siRNA	Short interfering RNA
SOD	Suoeroxide dismutase
SPPS	Solid phase peptide synthesis
SPT	Single particle tracking
SUV	Small unilamellar vesicles
TALENs	Transcription activator like effector nucleases
Tat	HIV-Tat derived CPP
TEM	Transmission electron microscopy
Tf	Transferrin
TF	Transcription factor
THP	Tumour homing peptide
TP	Transportan
TPP	Tumor penetrating peptide
TRITC	Tetramethyl rhodamine iso-thiocyanate
Yops	Human-pathogenic Yersinia plasmid-encoded Yersinia outer proteins
ZFNs	Zinc finger nucleases