

Zipping into fusion

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Abbreviations

A Alanine Ac Acetyl

ACH α-cyano-4-hydroxycinnamic acid

AcN Acetonitrile

AUC Analytical ultracentrifugation
BOC Tertiary-butoxycarbonyl

C Cysteine CC Coiled coil

CD Circular dichroism

CH/CHOL Cholesterol
Coil-E=E₃ (EIAALEK)₃
Coil-K=K₃ (KIAALKE)₃
D Aspartic acid
D Dimensional
D₂O Deuterated water
DCM Dichloromethane

Dh Hydrodynamic diameter
 DIC N,N'-Diisopropylcarbodiimide
 DIPEA N,N-diisopropylethylamine
 DLS Dynamic light scattering

DMF N,N-dimethylformamide **DNA** Deoxyribonucleic acid

DOPC 1,2-dioleoyl-sn-glycero-3-phosphatidylcholine **DOPE** 1,2-dioleoyl-sn-glycero-3-phosphatidylethanolamine

DOPE-LR 1,2-dioleoyl-sn-glycero-3-phosphatidylethanolamine-lissamine-rhodamine B

DOPE-NBD1,2-dioleoyl-sn-glycero-3-phosphoethanolamien-N-(7-nitro-2-1,3-benzoxadiazol-4-yl) (ammonium salt)

 \mathbf{E} Glutamic acid $\mathbf{E_2}$ (EIAALEK)₂ $\mathbf{E_4}$ (EIAALEK)₄

EPR Electron paramagnetic resonance

ESI Electrospray ionization

Epn Equation

Fmoc Fluorenylmethoxycarbonyl

FRET Fluorescence resonance energy transfer

G Glycine

HOBT

 ΔG_{μ} Gibbs free energy of unfolding

HCTU 1H-benzotriazolium1-[bis(dimethylamino)methylene]-5-chloro-

hexafluorophosphate (1-),3-oxide 1-Hydroxybenzotriazole hydrate

HPLC High-performance liquid chromatography

ΔH_u Enthalpy of unfolding

I Isoleucine K Lysine

K/E Complex of peptide K and E

 $\mathbf{K_2}$ (KIAALKE)₂ $\mathbf{K_4}$ (KIAALKE)₄

K_u Dimer dissociation constant

L Leucine

LC-MS Liquid chromatography-mass spectrometry
LPK Lipopeptide-K (DOPE-Peg12-peptide K)
LPE Lipopeptide-E (DOPE-Peg12-peptide E)

MALDI-TOF Matrix-assisted laser desorption-ionization time-of-flight

MTSL/* S-(2,2,5,5-tetramethyl-2,5-dihydro-1H-pyrrol-3-yl)methyl methanesulfonothioate

MD Molecular dynamics
NBD Nitrobenzofuran
NMP N-methyl-2-pyrrolidone
NMR Nuclear Magnetic Resonance

NSF N-ethylmaleimide sensitive fusion protein

PBS Phosphate buffered saline
PDA Photo Diode Array
PDI Polydispersity index
PEG Poly (ethylene glycol)

PRE Paramagnetic relaxation enhancement

R Arginine

RNA Ribonucleic acid

RP-HPLC Reverse-phase high-pressure liquid chromatography

RT Retention Time

S Serine

SDSL Site-directed spin label

SNARE Soluble NSF attachment protein receptor

SPPS Solid-phase peptide synthesis

TBS Tris-buffered saline
TEA triethanolamine
TFA Trifluoroacetic acid
TFE Trifluoroethanol

TFE-D₃ Deuterium oxide of TFE

Tris Tris(hydroxymethyl)aminomethane

tBu Tertiary butyl
T_m Melting temperature

THF Tetrahydrofuran
TIS Triisopropylsilane

Trt Trityl
UV Ultraviolet
Vdw Van der Waals
W Tryptophan
Y Tyrosine