

House Po 180-193



ProteoGenix SAS
Espace Européen de l'Entreprise
15 rue de La Haye
67300 Schiltigheim, France
Tel. +33 (0)3 90 20 54 70 - Fax +33 (0)3 88 56 16 88
contact@proteogenix.fr
www.ProteoGenix.science

Certificate Of Analysis - Custom Peptide

PEPTIDE:

SS-20

Séquence : SSKRGRQTPVLYAMLDHSRS
MW : 2289.62g/mol(MS)
Purity : 98.42%HPLC
GrossWeight : 250.0mg
Lot n° : P201208-LL853111
Reconstitution advice : H2O

QUALITY CONTROL: MS and HPLC: see attached documents

Handling of Lyophilized Peptide

Lyophilized peptides can be stored at -20°C to -80°C for years.
To avoid moisture, allow the peptide to warm at room temperature before opening the tube.
Close the tube immediately after use.

1) General guideline

The amino acid composition determines the properties of every individual peptide. Conjugation might also influence the solubilization. Testing of peptide solubility with a small amount of product is recommended. Use of distilled and sterile water or aqueous solution is preferable. Heating (<40°C) or sonication (bath) may improve solubilization. For peptides containing residue(s) sensitive to oxidation (C, M, W), preferably use degassed water and avoid basic solutions as well as DMSO. You may constitute a concentrated stock solution (≥ 1 mg/ml) for long-term storage at -20°C to -80°C.

2) Preparing peptide solutions

2.1) Peptide solubility in aqueous solutions

Optimal peptide solubility is generally obtained at neutral pH. Using a buffered solution is then recommended (e.g. phosphate-buffered saline or Tris-buffered saline pH 7-8).

Peptides shorter than 5 residues are generally soluble in water or aqueous buffer, except if all residues are hydrophobic (W, I, L, F, M, V or Y).

Peptides containing >25% charged residues (D, K, R, H, E) and <25% hydrophobic amino acids are usually soluble in water or aqueous buffer if charged residues are fairly distributed throughout the sequence.

Peptides containing > 50% hydrophobic residues may be insoluble or only partially soluble in aqueous solutions. In this case we recommend using organic solvents like DMSO (dimethylsulfoxide), DMF (dimethylformamide) or ACN (acetonitrile) for solubilization (see § 2.2).

Peptides containing >75% hydrophobic residues will not dissolve in aqueous solutions. These peptides generally require solubilization in very strong solvents such as TFA (Trifluoroacetate) or formic acid.

Peptide sequences containing a very high (>75%) proportion of S, T, E, D, K, R, H, N, Q or Y are capable of forming intermolecular hydrogen bonding networks and have a tendency to form gels in aqueous solutions. These peptides may have to be treated similarly to peptides with >50% hydrophobic residues.

2.2) Guideline for hydrophobic peptides

If a product is insoluble in water / buffer due to high hydrophobicity, addition of an organic solvent may be necessary. Please note that the solvent should be compatible with the experiment.

Example of solubilization with DMSO: dissolve the peptide in the smallest possible volume of a 50% (v/v) DMSO / water mixture, then slowly add water / buffer drop wise until the desired peptide concentration is achieved. If product precipitates during this process and cannot be re-dissolved by adding DMSO, lyophilization is required and another attempt of solubilization is needed.

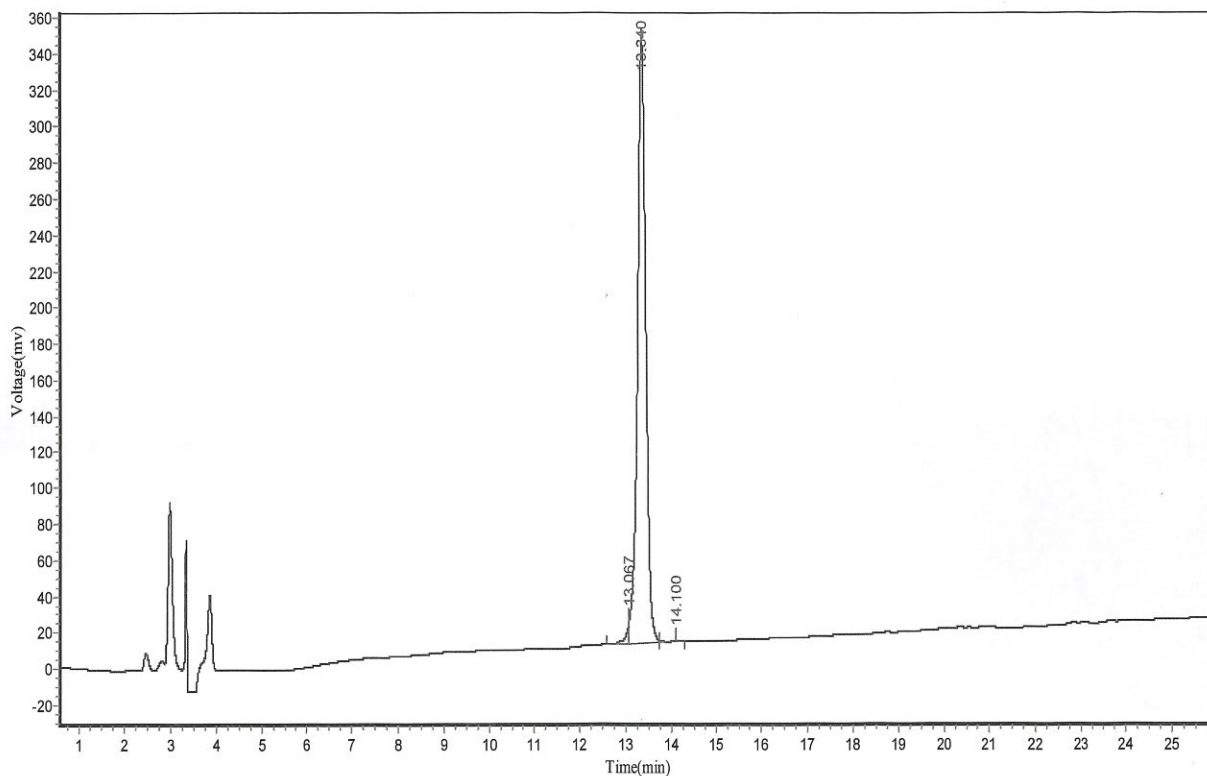
If DMSO interferes with your experimental conditions (C, M or W residues), DMF, ACN, or isopropyl alcohol can serve as alternative solvents. Basic peptides are usually well solubilized in 10% acetic acid or 0.1% TFA. Acidic peptides are usually well solubilized in 1% NH4OH. When solubilization is challenging, 1% SDS or 4-8M urea may give good results.

In some cases, the final peptide solution may require a high concentration of organic solvent or denaturant, which may not be applicable in biological studies.

Sample: PO=> Po(180-199) SS-20
 Lot. No.: P201208-LL853111
 Column: Kromasil 100-5C18, 4.6*250mm, 5µm
 Solvent A: A: 0.1% Trifluoroacetic Acid in 100% Acetonitrile
 Solvent B: B: 0.1% Trifluoroacetic Acid in 100% Water
 Gradient:

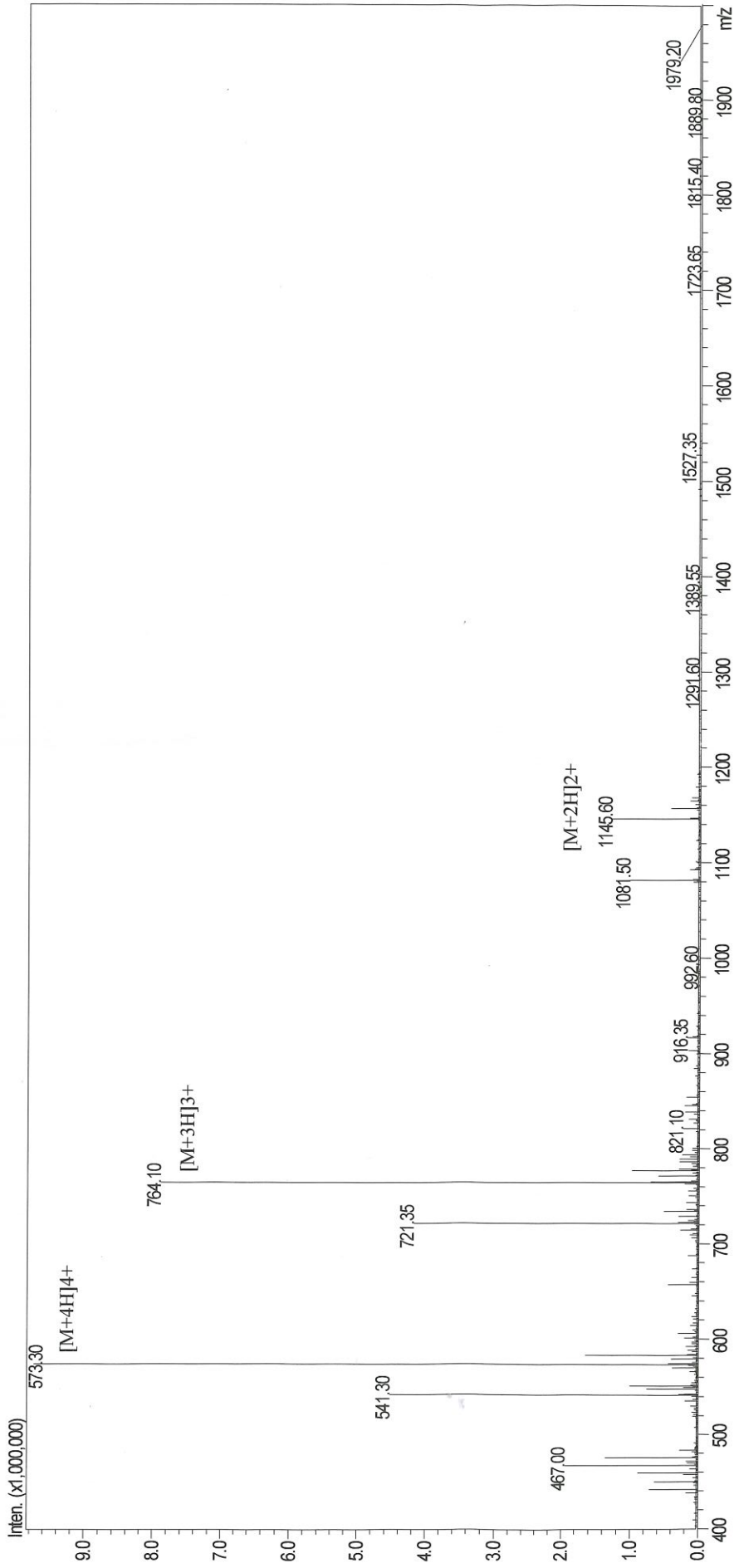
	A	B
0.0min	21%	79%
25.0min	46%	54%
25.1min	100%	0%
30.0min	Stop	

Volume: 10µl
 Wavelength: 220nm
 Flow rate: 1.0ml/min



Peak	Time	Height	Area	Conc.
1	13.067	12383.016	55871.188	1.3050
2	13.340	332218.531	4213667.000	98.4230
3	14.100	788.101	11643.915	0.2720
Total				100.0000

MASS SPECTROMETRY REPORT



Sample Information

Injection Volume : 1.00 μ l
Sample: P0=> P0(180-199) SS-20
M.W.: 2289.62
Lot. No.: P201208-LL853111

Probe: ESI
Nebulizer Gas Flow: 1.5L/min
CDL: -20.0v
CDL Temp.: 250 $^{\circ}$ C
Block Temp.: 400 $^{\circ}$ C

Probe Bias: +4.5kv
Detector: 1.2kv
T. Flow: 0.2ml/min
B. Conc.: 50%H2O/50%ACN