

## Peptide Solubility Test Report

<b>Name</b>	
<b>Order ID</b>	
<b>Lot No.</b>	
<b>Sequence</b>	

<b>Solvent<sup>1</sup></b>	<b>Results<sup>2</sup> (Dissolved or Undissolved)</b>	<b>Gross Peptide Concentration</b>
ultrapure water	<b>Dissolved</b>	≅ 5mg/ml
1x DPBS*(pH 7.1 ± 0.1)	<b>Dissolved</b>	≅ 10mg/ml
DMSO*	<b>Dissolved</b>	≅ 20mg/ml
Others*	<b>N/A</b>	<b>N/A</b>

DMSO: dimethyl sulfoxide (Analytical grade);

DPBS Dulbecco's Phosphate Buffered Saline, containing Potassium Chloride (KCl), Potassium Phosphate monobasic (KH<sub>2</sub>PO<sub>4</sub>), Sodium Chloride (NaCl) and Sodium Phosphate dibasic (Na<sub>2</sub>HPO<sub>4</sub>·7H<sub>2</sub>O).

<b>Comments:</b>
1. Solubility less than 0.1 mg/ml is defined as 'Undissolved'. Otherwise, it will be defined as 'Dissolved', and an estimated concentration range will be provided.
2. For preparing solutions in aqueous-based buffers (or your desired buffer), which keeps the pH of a solution relatively constant as required for many biochemical processes, it is recommended to first dissolve the peptide in a minimum soluble amount of water (e.g. 1 ml water for 1 mg peptide if the solubility is 1 mg/ml) and then re-adjust the solution composition with pre-made concentrated buffer, e.g., adding 1 part (v:v) 10x DPBS to 9 parts (v:v) solubilized peptide to obtain the required 1x PBS peptide-solution.
3. Peptides containing Cysteine (C), Methionine (M) or Tryptophan (W) are sensitive to oxidation by DMSO. We advise that peptides dissolved in DMSO be used immediately or stored at -20 °C (or preferably -80 °C) prior to use.
4. When the peptide is neither soluble in water or DMSO in our tests, please refer to the above table for other suggested solvents.
<b>5. Please note that distinct dissolution behaviors may happen between small amounts and large amounts of gross peptide in the same solvent. Generally, larger amounts of peptide take longer to dissolve. A brief incubation at warm temperatures (&lt;40°C) or sonication can assist in dissolving the peptide.</b>

Tested by: