## Print Date: Jan 18th 2024

# **Certificate of Analysis**

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Product Name:	Klotho-derived peptide 6	
CAS Number:	2102414-23-1	

Catalog No.: 7847 Batch

Batch No.: 1

# 1. PHYSICAL AND CHEMICAL PROPERTIES

	Batch Molecular Formula:	C <sub>159</sub> H <sub>232</sub> N <sub>46</sub> O <sub>44</sub>	
	Batch Molecular Weight:	3491.87	
	Physical Appearance:	White lyophilised solid	
	Counter Ion:	TFA	
	Solubility:	Soluble to 1 mg/ml in water	
	Storage:	Store at -20°C	
	Peptide Sequence:	Gln-Pro-Val-Val-Thr-Leu-Tyr-His-Trp-Asp- Leu-Pro-Gln-Arg-Leu-Gln-Asp-Ala-Tyr-Gly- Gly-Trp-Ala-Asn-Arg-Ala-Leu-Ala-Asp-His	
2.	ANALYTICAL DATA		
	HPLC:	Shows 95.9 % purity	
	Mass Spectrum:	Consistent with structure	

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# **Product Information**

# Product Name: Klotho-derived peptide 6

Klotho-derived peptide 6 is a β-catenin signaling inhibitor. Binds

to and sequesters Wnt ligands in vitro; prevents expression of

Wnt1-induced fibronectin and  $\alpha$ -smooth muscle action. In an in

vivo mouse model of diabetic kidney disease, Klotho-derived peptide 6 reduces kidney injury, improves survival and prevents

accumulation of fibronectin and collagen IV in glomeruli.

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**Physical and Chemical Properties:** 

Batch Molecular Weight: 3491.87

**Peptide Sequence:** 

Batch Molecular Formula: C<sub>159</sub>H<sub>232</sub>N<sub>46</sub>O<sub>44</sub>

Physical Appearance: White lyophilised solid

GIn-Pro-Val-Val-Thr-Leu-Tyr-His-Trp-Asp-

Leu-Pro-GIn-Arg-Leu-GIn-Asp-Ala-Tyr-Gly-

Gly-Trp-Ala-Asn-Arg-Ala-Leu-Ala-Asp-His

## Storage: Store at -20°C

## Solubility & Usage Info:

Soluble to 1 mg/ml in water

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

#### Counter Ion: TFA

#### **Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2  $\mu$ m filter to remove potential bacterial contamination whenever possible.

#### **References:**

**Chen** *et al* (2022) Klotho-derived peptide 6 ameliorates diabetic kidney disease by targeting Wnt/β-catenin signaling. Kidney Int. **102** 506. PMID: 35644285.

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**Description:** 

Catalog No.: 7847

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