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TOCRIS

Print Date: Mar 12th 2024

Certificate of Analysis

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Product Name: **KISS1 305** **Catalog No.: 7490** **Batch No.: 1**

CAS Number: 872717-97-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{56}H_{76}N_{16}O_{12}$

Batch Molecular Weight: 1165.32

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in water

Storage: Store at -20°C

Peptide Sequence: D-Tyr-D-Pya(4)-Asn-Ser-Phe-azaGly-Leu-Arg(Me)-Phe-NH_2

2. ANALYTICAL DATA

HPLC: Shows 97.6% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys		
Arg	1.00	Detected	Met		
Asx	1.00	1.02	Phe	2.00	2.09
Cys			Pro		
Glx			Ser	1.00	0.97
Gly			Thr		
His			Trp		
Ile			Tyr	1.00	0.95
Leu	1.00	0.97	Val		

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Product Name: **KISS1 305** **Catalog No.: 7490** **1**

CAS Number: 872717-97-0

Description:

KISS1 305 is a potent Kisspeptin1 receptor agonist (EC_{50} = 10 nM). It binds with high affinity to rat and human KISS1 receptors with K_i values of 0.14 nM and 0.11 nM respectively. In vivo, chronic administration of KISS1 305 reduces plasma testosterone and genital organ weights in male rats.

Physical and Chemical Properties:

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Physical Appearance: White lyophilised solid

Peptide Sequence:

D-Tyr-D-Pya(4)-Asn-Ser-Phe-azaGly-Leu-Arg(Me)-Phe-NH_2

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and 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 µm filter to remove potential bacterial contamination whenever possible.

Licensing Information:

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the KISS1-305 probe summary on the SGC website.

References:

Müller *et al* (2018) Donated chemical probes for open science. Elife ***7*** e34311. PMID: 29676732.

Asami *et al* (2014) Physicochemically and pharmacokinetically stable nonapeptide KISS1 receptor agonists with highly potent testosterone-suppressive activity. J.Med.Chem. ***57*** 6105. PMID: 24918545.

Asami *et al* (2013) Design, synthesis, and biological evaluation of novel investigational nonapeptide KISS1R agonists with testosterone-suppressive activity. J.Med.Chem. ***56*** 8298. PMID: 24047141.