

Certificate of Analysis

www.tocris.com**Product Name:** GRK2i**Catalog No.:** 3594**Batch No.:** 6

CAS Number: 148505-03-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₅₃ H ₂₅₆ N ₅₀ O ₄₁ S
Batch Molecular Weight:	3484.08
Physical Appearance:	White lyophilised solid
Counter Ion:	TFA
Solubility:	Soluble to 2 mg/ml in water
Storage:	Store at -20°C
Peptide Sequence:	Trp-Lys-Lys-Glu-Leu-Arg-Asp-Ala-Tyr-Arg-Glu-Ala-Gln-Gln-Leu-Val-Gln-Arg-Val-Pro-Lys-Met-Lys-Asn-Lys-Pro-Arg-Ser

2. ANALYTICAL DATA

HPLC:	Shows 98.8% purity
Mass Spectrum:	Consistent with structure

3. AMINO ACID ANALYSIS DATA

	Amino Acid Theoretical Actual		Amino Acid Theoretical Actual	
Ala	2.00	1.87	Lys	5.00
Arg	4.00	4.01	Met	1.00
Asx	2.00	2.01	Phe	
Cys			Pro	2.00
Glx	5.00	5.02	Ser	1.00
Gly			Thr	
His			Trp	1.00
Ile			Tyr	1.00
Leu	2.00	1.91	Val	2.00
				1.96

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Product Information

www.tocris.com**Product Name:** GRK2i**Catalog No.:** 3594

6

CAS Number: 148505-03-7

Description:

GRK2i is a GRK2 inhibitory polypeptide that specifically inhibits G β γ activation of GRK2. Corresponds to the G β γ -binding domain and acts as a cellular G β γ antagonist.

Physical and Chemical Properties:Batch Molecular Formula: C₁₅₃H₂₅₆N₅₀O₄₁S

Batch Molecular Weight: 3484.08

Physical Appearance: White lyophilised solid

Storage: Store at -20°C**Solubility & Usage Info:**

Soluble to 2 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 as 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 μ m filter to remove potential bacterial contamination whenever possible.

References:

Dang et al (2009) Two distinct mechanisms mediate acute μ -opioid receptor desensitization in native neurons. *J.Neurosci.* **29** 3322. PMID: 19279269.

Macrez et al (1997) A β γ dimer derived from G₁₃ transduces the angiotensin AT₁ receptor signal to stimulation of Ca²⁺ channels in rat portal vein myocytes. *J.Biol.Chem.* **272** 23180. PMID: 9287322.

Koch et al (1994) Cellular expression of the carboxyl terminus of a G protein-coupled receptor kinase attenuates G β γ -mediated signaling. *J.Biol.Chem.* **269** 6193. PMID: 8119963.

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