bio-techne
TOCRIS

Print Date: Aug 31st 2023

Certificate of Analysis

www.tocris.com

Product Name: **KRpep-2d** **Catalog No.: 7928** **Batch No.: 1**

CAS Number: 2098181-84-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{108}H_{182}N_{44}O_{25}S_2$

Batch Molecular Weight: 2561.03

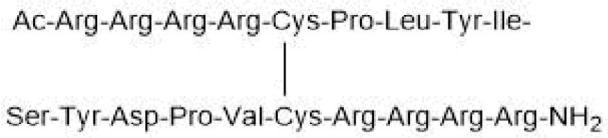
Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 2 mg/ml in water

Storage: Store at -20°C

Peptide Sequence:



2. ANALYTICAL DATA

HPLC: Shows 98.0 % purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys		
Arg	8.00	7.92	Met		
Asx	1.00	1.01	Phe		
Cys	2.00	Detected	Pro	2.00	2.01
Glx			Ser	1.00	0.98
Gly			Thr		
His			Trp		
Ile	1.00	0.95	Tyr	2.00	2.00
Leu	1.00	1.02	Val	1.00	0.97

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **KRpep-2d** **Catalog No.: 7928** **1**

CAS Number: 2098181-84-9

Description:

KRpep-2d is a potent KRAS inhibitor. Selective for G12D mutant KRAS over wild type KRAS (IC_{50} = 1.6 nM and 42 nM respectively). Allosterically binds to KRAS to block interaction with substrate, such as GDP. Cell permeable and suitable for use in vitro.

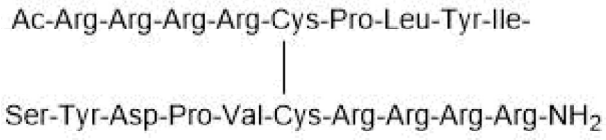
Physical and Chemical Properties:

Batch Molecular Formula: $C_{108}H_{182}N_{44}O_{25}S_2$

Batch Molecular Weight: 2561.03

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 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 µm filter to remove potential bacterial contamination whenever possible.

References:

Sakamoto *et al* (2017) K-Ras(G12D)-selective inhibitory peptides generated by random peptide T7 phage display technology. Biochem.Biophys.Res.Commun. ***484*** 605. PMID: 28153726.