bio-techne
TOCRIS

Print Date: Aug 10th 2023

# Certificate of Analysis

www.tocris.com

**Product Name:** **DC 432** **Catalog No.: 7907** **Batch No.: 1**

CAS Number: 2388988-70-1

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{55}H_{100}N_{28}O_{10}$

**Batch Molecular Weight:** 1313.59

**Physical Appearance:** White lyophilised solid

**Counter Ion:** TFA

**Solubility:** Soluble to 2 mg/ml in water

**Storage:** Store at -20°C

**Peptide Sequence:** 4-Hydroxyphenylacetyl-Pro-Lys-Arg-Arg-Arg-Arg-Arg-Arg-Arg-$NH_2$

## 2. ANALYTICAL DATA

**HPLC:** Shows 99.0% purity

**Mass Spectrum:** Consistent with structure

## 3. AMINO ACID ANALYSIS DATA

| Amino Acid | Theoretical | Actual | Amino Acid | Theoretical | Actual |
|---|---|---|---|---|---|
| Ala | | | Lys | 1.00 | 1.03 |
| Arg | 6.00 | 5.92 | Met | | |
| Asx | | | Phe | | |
| Cys | | | Pro | 1.00 | 1.05 |
| Glx | | | Ser | | |
| Gly | | | Thr | | |
| His | | | Trp | | |
| Ile | | | Tyr | | |
| Leu | | | Val | | |



**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:** **DC 432** **Catalog No.: 7907** **1**

CAS Number: 2388988-70-1

**Description:**

DC 432 is a potent peptidomimetic inhibitor of N-terminal methyltransferase1/2 (NTMT1/2) ($IC_{50}$ of 54 nM). Comprises a BM30 peptide with five additional arginine residues; it exhibits cellular penetration at 1 µM. DC 432 treatment in HCT116 cells leads to a decrease in the N-terminal methylation level of the regulator of chromosome condensation 1 and SET proteins.

**Physical and Chemical Properties:**

Batch Molecular Formula: $C_{55}H_{100}N_{28}O_{10}$

Batch Molecular Weight: 1313.59

Physical Appearance: White lyophilised solid

**Peptide Sequence:**

4-Hydroxyphenylacetyl-Pro-Lys-Arg-Arg-Arg-Arg-Arg-Arg-$NH_2$

**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:**

**Mackie** *et al* (2020) Selective peptidomimetic inhibitors of NTMT1/2: rational design, synthesis, characterization, and crystallographic studies. J.Med.Chem. ***63*** 9512. PMID: 32689795.