

Product Name: STAD 2

Catalog No.: 6566

Batch No.: 1

CAS Number: 1542100-77-5

Description:

AKAP disruptor. Selectively binds PKA-RII subunit with high affinity ($K_d = 6.2$ nM) and blocks its interaction with AKAP. Cell permeable. Selectively permeable to malaria-infected red blood cells and displays antimalarial activity through a PKA-independent mechanism.

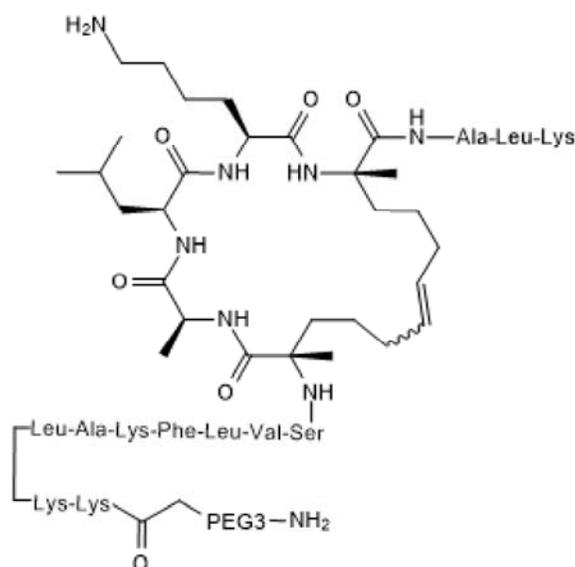
Physical and Chemical Properties:

Batch Molecular Formula: $C_{102}H_{182}N_{24}O_{22}$

Batch Molecular Weight: 2096.68

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 50% acetonitrile / 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.

Net Peptide Content: 72% (Remaining weight made up of counterions and residual water).

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 µm filter to remove potential bacterial contamination whenever possible.

References:

Bendzun *et al* (2018) Investigating PKA-RII specificity using analogs of the PKA:AKAP peptide inhibitor STAD-2. *Bioorg.Med.Chem.* **26** 1174. PMID: 29449124.

Flaherty *et al* (2015) The stapled AKAP disruptor peptide STAD-2 displays antimalarial activity through a PKA-independent mechanism. *PLoS One* **10** e0129239. PMID: 26010880.

Wang *et al* (2014) Isoform-selective disruption of AKAP-localized PKA using hydrocarbon stapled peptides. *ACS Chem.Biol.* **9** 635. PMID: 24422448.

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

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