

Product Name: OXA (17-33)

Catalog No.: 5115

Batch No.: 3

CAS Number: 343268-91-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇₉H₁₂₅N₂₃O₂₂
Batch Molecular Weight: 1749
Physical Appearance: White lyophilised solid
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Store at -20°C
Peptide Sequence: Tyr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Leu-NH₂

2. ANALYTICAL DATA

HPLC: Shows 97.3 % purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

| Amino Acid | | Theoretical | Actual | Amino Acid | | Theoretical | Actual |
|------------|------|-------------|--------|------------|------|-------------|--------|
| Ala | | 3.00 | 2.93 | Lys | | | |
| Arg | | | | Met | | | |
| Asx | 1.00 | 1.00 | 1.03 | Phe | | | |
| Cys | | | | Pro | | | |
| Glx | 1.00 | 0.97 | | Ser | | | |
| Gly | 3.00 | 3.08 | | Thr | 1.00 | 1.05 | |
| His | 2.00 | 2.08 | | Trp | | | |
| Ile | 1.00 | 1.00 | | Tyr | 1.00 | 0.97 | |
| Leu | 4.00 | 3.96 | | Val | | | |

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

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CAS Number: 343268-91-7

Description:

OXA (17-33) is a potent and selective peptide orexin OX₁ receptor agonist (EC₅₀ values are 8.29 and 187 nM for OX₁ and OX₂ receptors respectively). Truncated form of orexin A (Cat. No. 1455).

Physical and Chemical Properties:Batch Molecular Formula: C₇₉H₁₂₅N₂₃O₂₂

Batch Molecular Weight: 1749

Physical Appearance: White lyophilised solid

Peptide Sequence:

Tyr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-
Ala-Ala-Gly-Ile-Leu-Thr-Leu-NH₂

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 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:

German et al (2013) Truncated orexin peptides: structure-activity relationship studies. *Med.Chem.Lett.* **4** 1224. PMID: 24707347.

Darker et al (2001) Structure-activity analysis of truncated orexin-A analogues at the orexin-1 receptor. *Bioorg.Med.Chem.Lett.* **11** 737. PMID: 11266181.

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