



CERTIFICATE OF ANALYSIS

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1. Identification

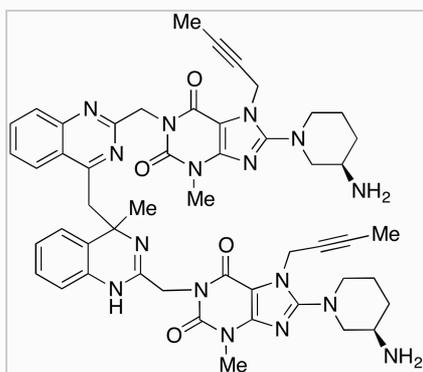
Catalogue Number: L465910

CAS Number: 1418133-47-7

Product: Linagliptin Methyl dimer (~90%)

Synonym: 8-[(3R)-3-Amino-1-piperidinyl]-1-[[4-[[2-[[8-[(3R)-3-amino-1-piperidinyl]-7-(2-butyn-1-yl)-2,3,6,7-tetrahydro-3-methyl-2,6-dioxo-1H-purin-1-yl]methyl]-1,4-dihydro-4-methyl-4-quinazolinyl]methyl]-2-quinazolinyl]methyl]-7-(2-butyn-1-yl)-3,7-dihydro-3-methyl-1H-purine-2,6-dione; 8-((R)-3-Aminopiperidin-1-yl)-1-((4-((2-((8-((R)-3-aminopiperidin-1-yl)-7-(but-2-yn-1-yl)-3-methyl-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-1-yl)methyl)-4-methyl-1,4-dihydroquinazolin-4-yl)methyl)quinazolin-2-yl)methyl)-7-(but

Structure:



Molecular Formula:

C₅₀H₅₆N₁₆O₄

Molecular weight:

945.08

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly)

Lot Number: 2-MIB-88-3

Purity: ~90%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Off-White to Pale Beige Solid	Pale Beige Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 60.36, %H: 5.45, %N: 22.31
HPLC Purity	Report Result	93.17% (230 nm)
MS	Conforms to Structure	Conforms
Specific Rotation	Report Result	-21.1° (c = 0.1, Methanol)

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By

Evan Burns

**Reviewed By**

Toni Rantanen

**C of A Approved
By**

Chanell Chu

**Test Date**

12/10/2021

Retest Date

12/8/2025