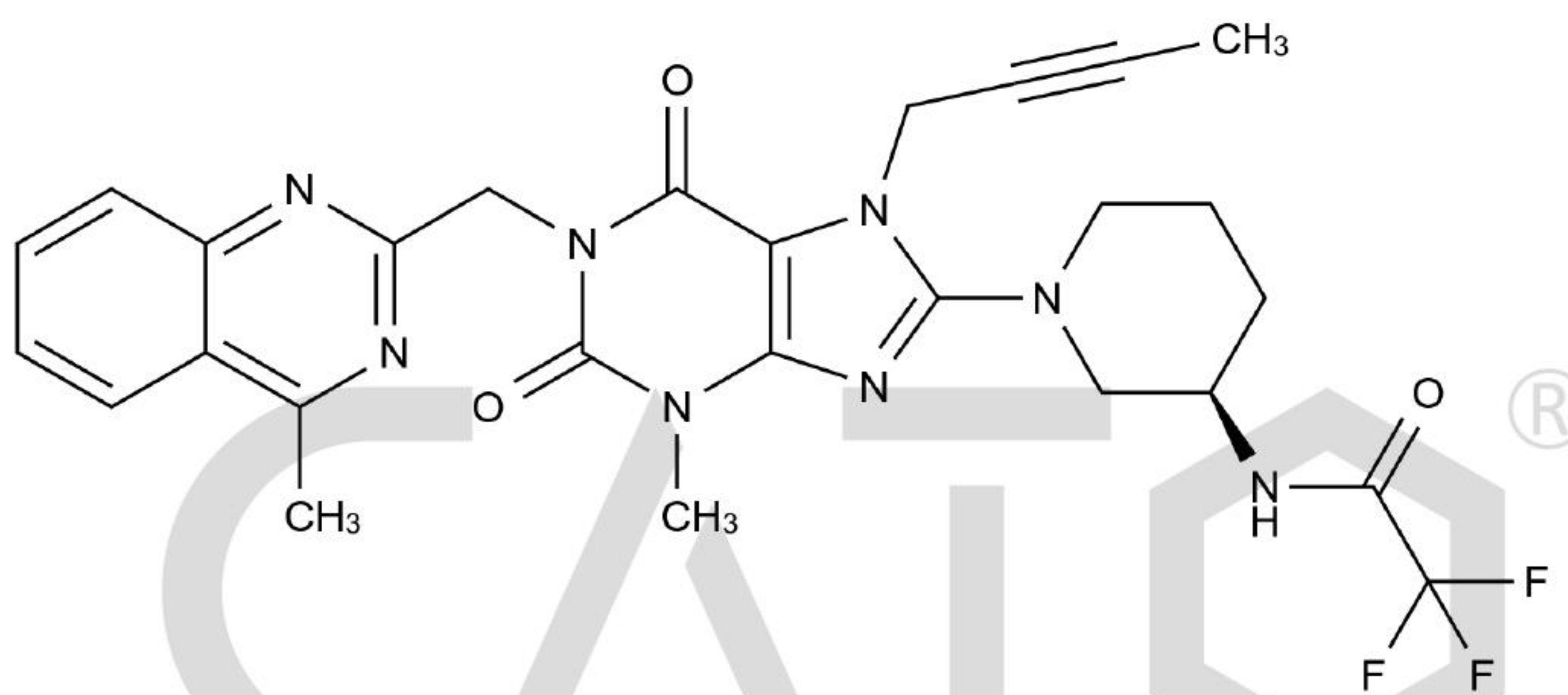


Certificate of Analysis

Reference Material & Standard

Product Name:	Linagliptin Impurity 77	Catalogue Number:	C4X-110177
Synonyms:	N/A	Lot Number:	0909-RF-0010
CAS Number:	1673546-62-7	Expiry Date:	Sep 11, 2027
Molecular Formula:	C ₂₇ H ₂₇ F ₃ N ₈ O ₃	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	568.55	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Light Yellow Solid
Identification	LCMS&IR&UV&CNMR&HNMR	Confirmed
Purity	HPLC	98.941%
Loss On Drying	TGA	0.7798%
Assay		98.2%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Sep 12, 2024

Date: Sep 12, 2024

Date: Sep 12, 2024

