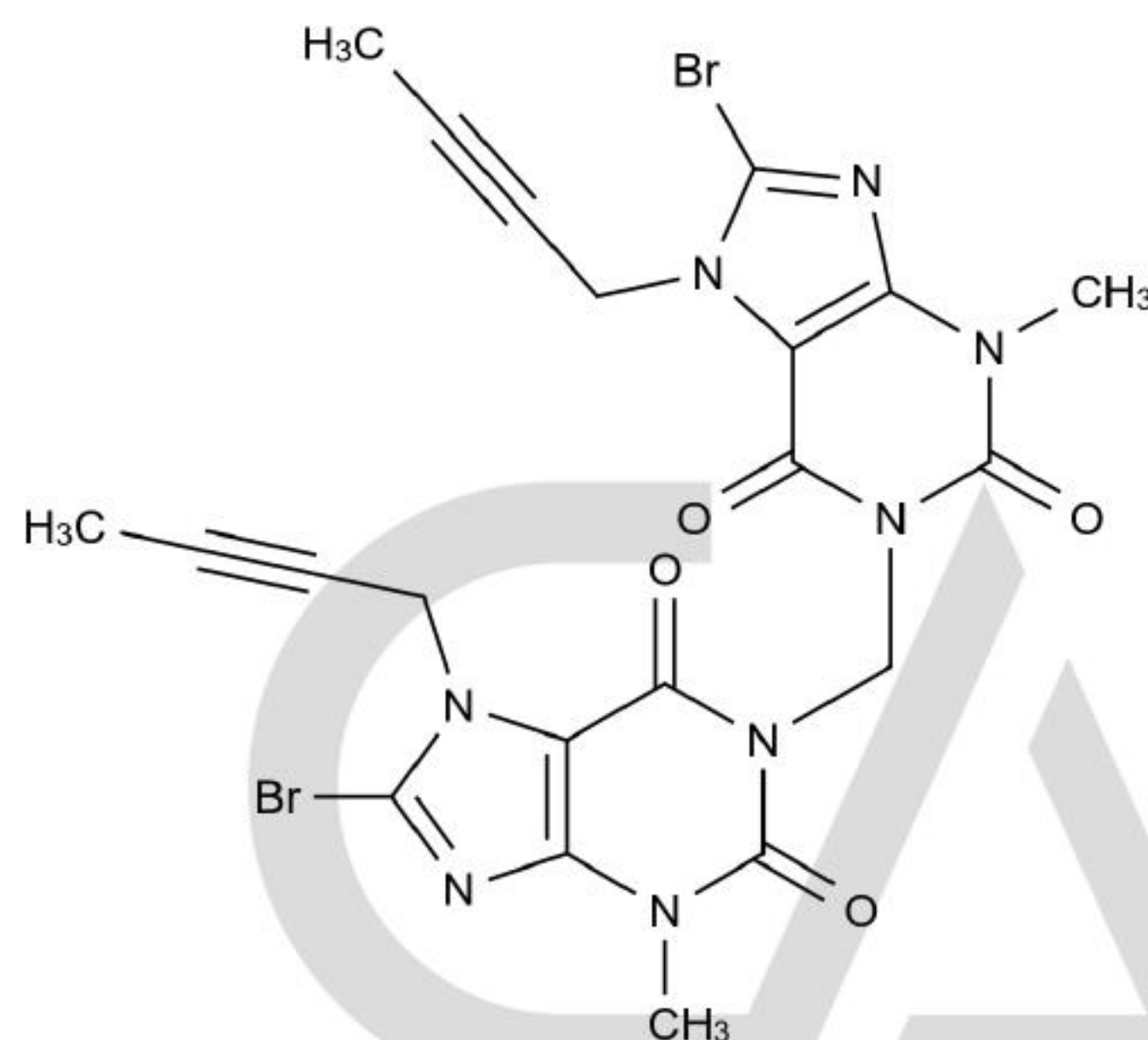


Certificate of Analysis

Reference Material & Standard

Product Name:	Linagliptin impurity 167	Catalogue Number:	C4X-1101167
Synonyms:	N/A	Lot Number:	0824-RH-0050
CAS Number:	N/A	Expiry Date:	Aug 25, 2030
Molecular Formula:	C ₂₁ H ₁₈ Br ₂ N ₈ O ₄	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	606.23	Shipping Condition:	Shipping with Ice Packs

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	100.00%
Loss on Drying	TGA	0.2980%
Assay		99.7%

Comment:

The calculation of the mass balance 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:

Koi

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Aug 26, 2026

Date: Aug 26, 2026

Date: Aug 26, 2026



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