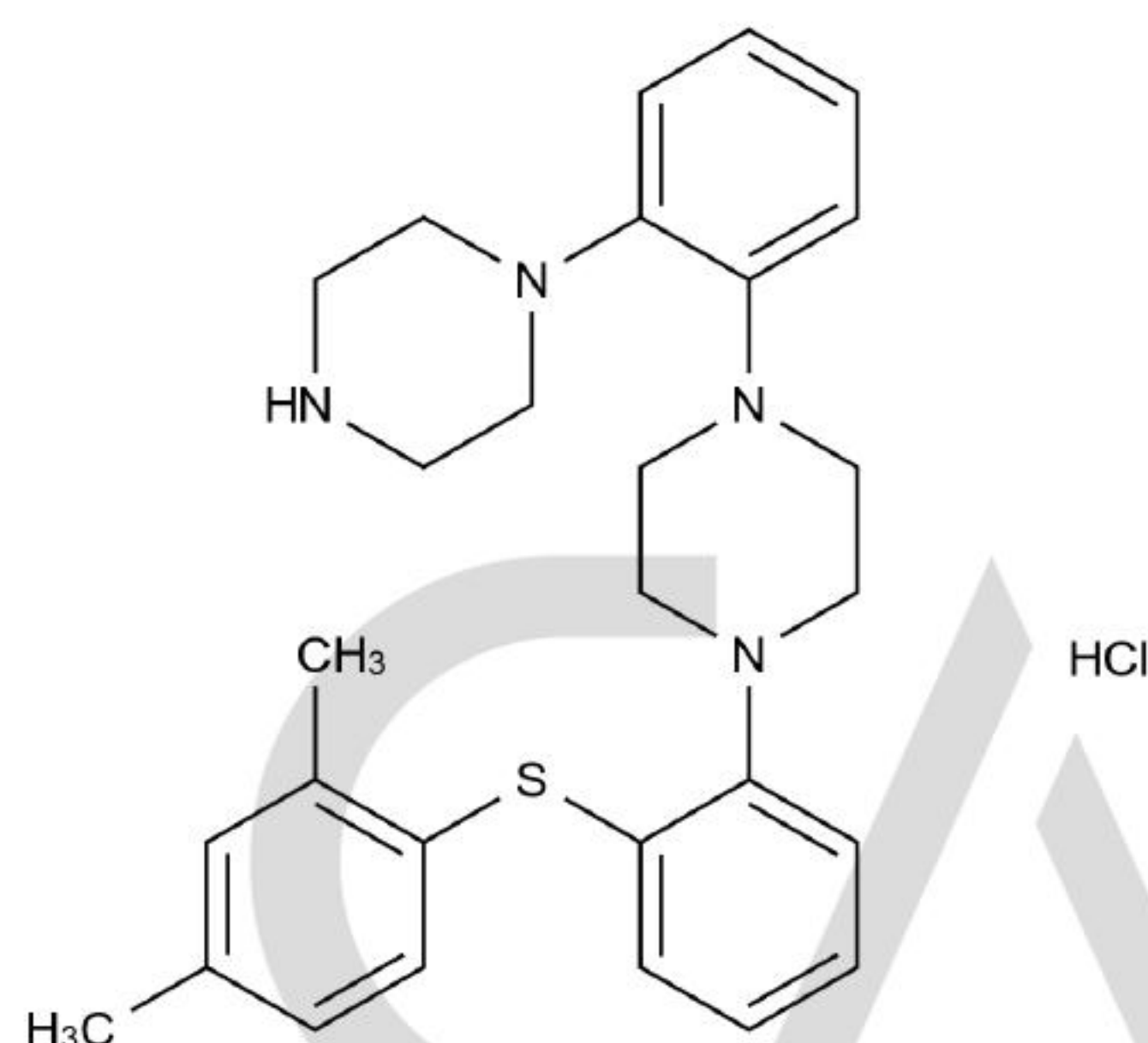


Certificate of Analysis

Reference Material & Standard

Product Name:	Vortioxetine Impurity 20 HCl	Catalogue Number:	C4X-105620
Synonyms:	N/A	Lot Number:	1114-RG-0009
CAS Number:	1240670-85-2(free base)	Expiry Date:	Oct 29, 2029
Molecular Formula:	C ₂₈ H ₃₄ N ₄ S HCl	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	458.66 36.46	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&UV&HNMR	Confirmed
Purity	HPLC	99.032%
Water Content	Karl Fischer	2.30%
Residual Solvents	NMR	0.47% n-hexane and 0.42% dichloromethane
Assay		95.9%

Comment:

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

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Koi

Reviewed by:

Hinlam

Approved by General Manager:

David

Date: Nov 17, 2025

Date: Nov 17, 2025

Date: Nov 17, 2025



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