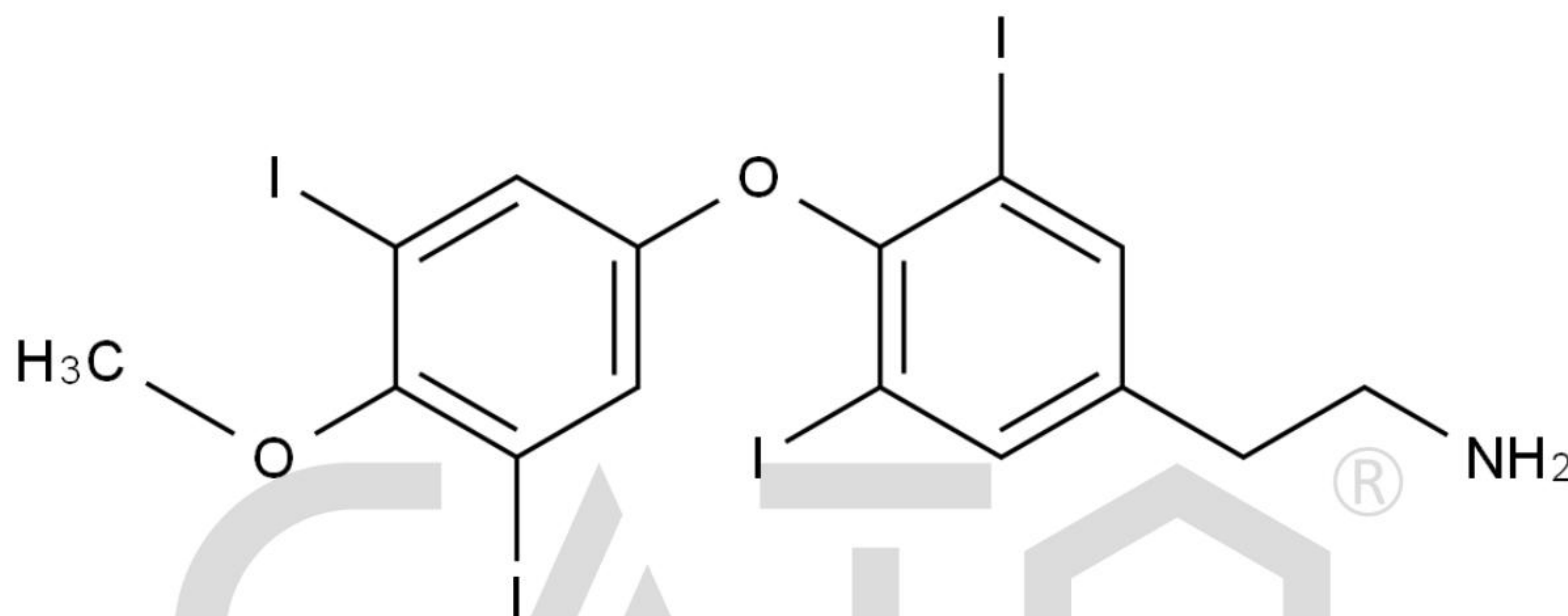


Certificate of Analysis

Reference Material

Product Name:	Levothyroxine Impurity 20	Catalogue Number:	C4X-167820
Chemical Name:	N/A	Lot Number:	0415-RD-0109
CAS Number:	2230724-39-5	Expiry Date:	Sep 22, 2024
Molecular Formula:	C ₁₅ H ₁₃ I ₄ NO ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	746.89		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&IR&HNMR	Confirmed
Purity	HPLC	99.2121%
Water Content	Karl Fischer	0.3%
Residual Solvents	NMR	0.1% dichloromethane and 0.1% methanol
Assay		98.7%

Comment:

The calculation of the 100% method follows the formula:

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:

Hin Lam

Reviewed by:

Cady

Aporoved by General manager:

David

Date: Sep 22, 2021

Date: Apr 19, 2022

Date: Apr 19, 2022

Tel: +86-20-81960175

Fax: +86-20-81717260

Email: supports@cato-chem.com

Web: www.cato-chem.com

Add: Room 101, Building B, No.179, Guangpu East Road, Huangpu District, Guangzhou (Location: Room 301, Room 401, Room 501)

