

Certificate of Analysis



Product Identification

Chemical Structure

Catalog number	HB17774
Compound name	Thioflavin X (ThX)
Chemical name	6-methoxy-3-methyl-2-(4-pyrrolidin-1-ylphenyl)-1,3-benzothiazol-3-ium iodide
Basic molecular formula	C ₁₉ H ₂₁ N ₂ OS
Basic molecular weight	452.35
Batch number	E2611-8-15
Batch molecular formula	C ₁₉ H ₂₁ N ₂ OS.0.75H ₂ O
Batch molecular weight	465.86
Origin	Synthetic

Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >97% purity	Meets specification: 97.3%
NMR	¹ H NMR in DMSO at 400 MHz consistent with structure	Meets specification
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in 10% MeOH/ Dichloromethane shows one spot under UV	Meets specification
Physical appearance	Orange solid	Meets specification: Orange solid
Solubility	Soluble in DMSO (100mM) and in EtOH (10 mM)	Meets specification

Produced by Richard Patterson

Signature

Passed by Steve Roome

Signature

Date

19/03/2025

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.