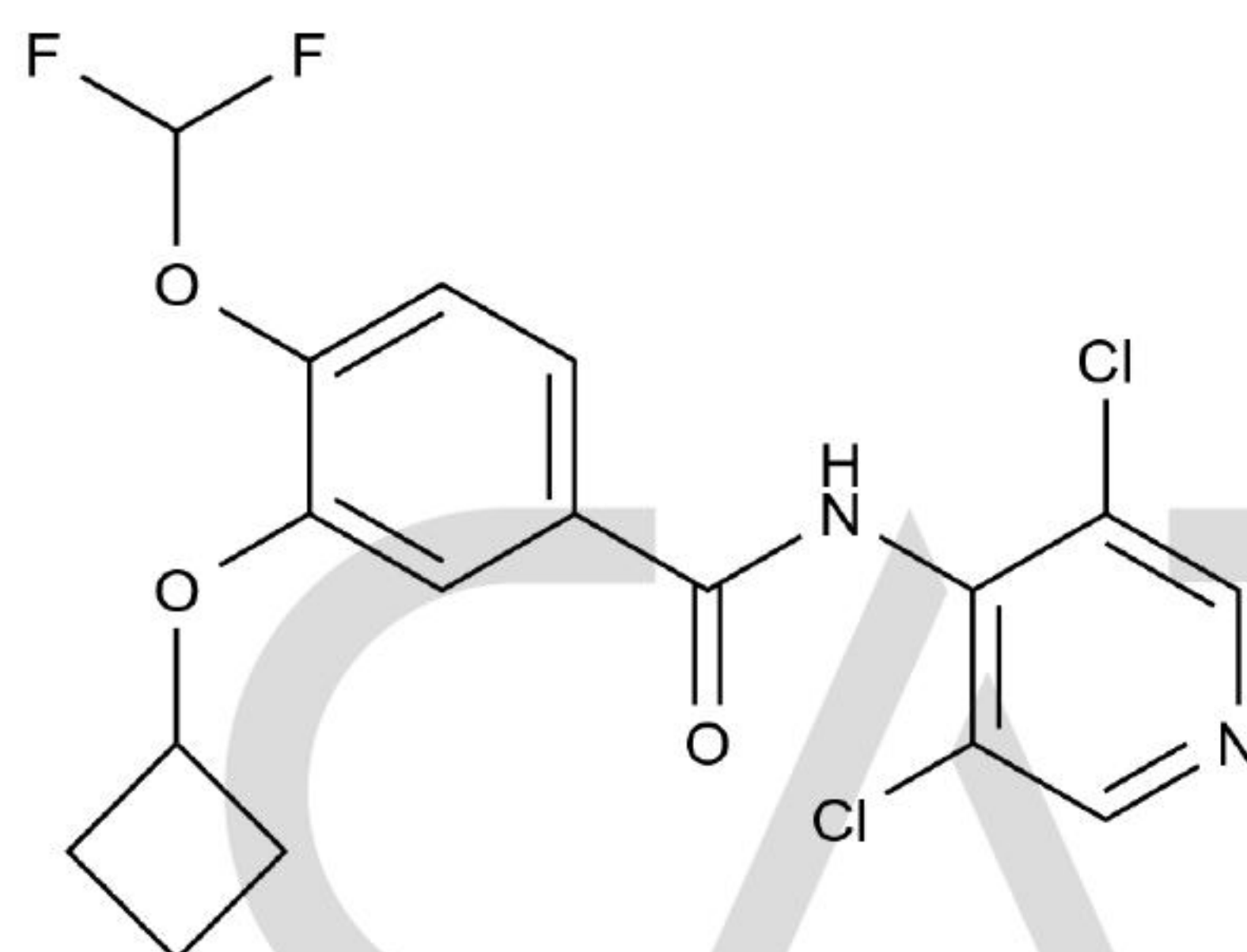


Certificate of Analysis

Reference Material & Standard

Product Name:	Roflumilast Impurity 29	Catalogue Number:	C4X-108429
Synonyms:	N/A	Lot Number:	0712-RH-0002
CAS Number:	2368178-28-1	Expiry Date:	Jul 13, 2030
Molecular Formula:	C ₁₇ H ₁₄ Cl ₂ F ₂ N ₂ O ₃	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	403.21	Shipping Condition:	Shipping at Room Temperature
Solubility:	Acetonitrile		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&IR&UV&FNMR&HNMR	Confirmed
Purity	HPLC	99.343%
Loss on Drying	TGA	0.1829%
Assay		99.2%

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:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Jul 14, 2026

Date: Jul 14, 2026

Date: Jul 14, 2026



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

