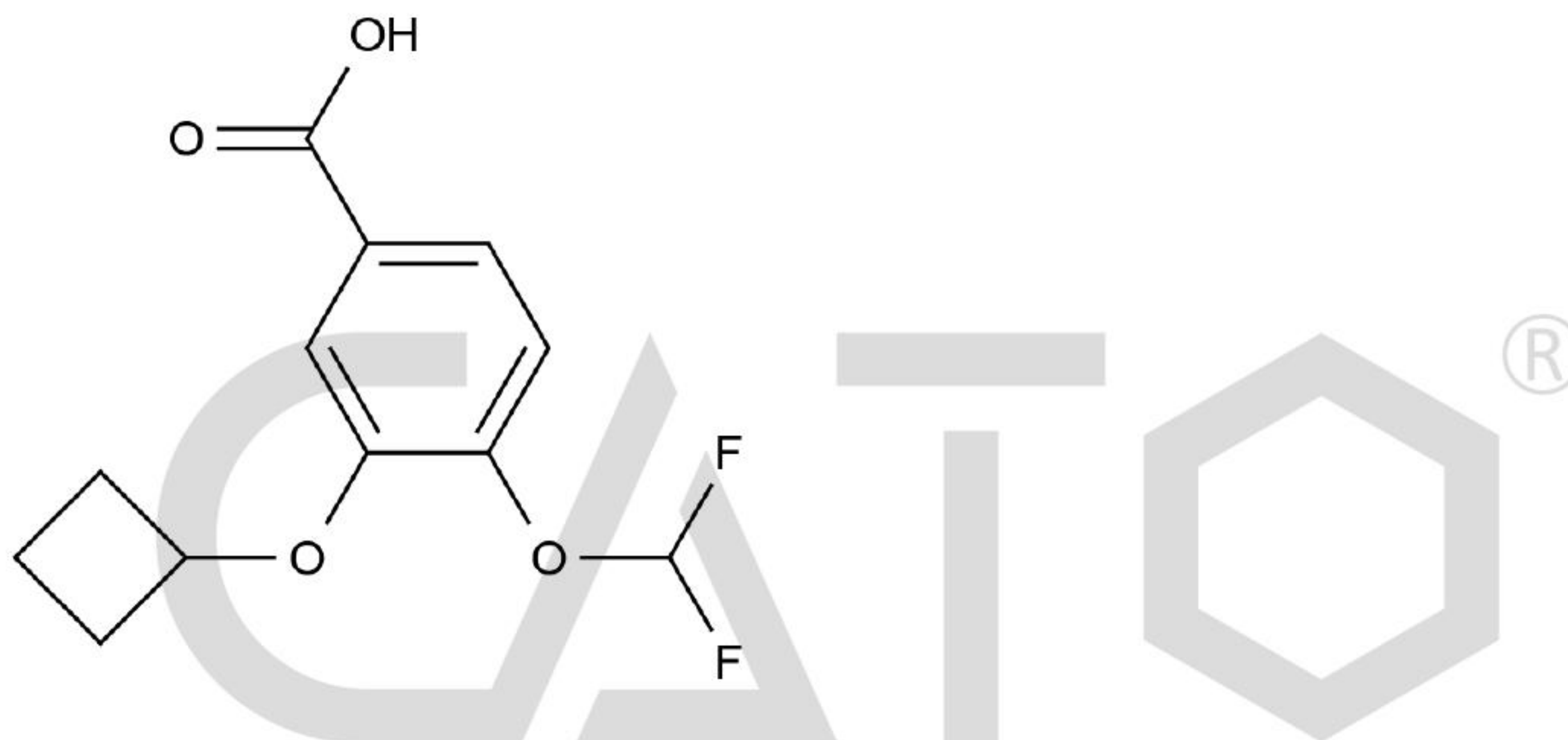


Certificate of Analysis

Reference Material & Standard

Product Name:	Roflumilast Impurity 33	Catalogue Number:	C4X-108433
Synonyms:	N/A	Lot Number:	0822-RG-0131
CAS Number:	2376345-94-5	Expiry Date:	Aug 25, 2029
Molecular Formula:	C ₁₂ H ₁₂ F ₂ O ₄	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	258.22	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&IR&UV&HNMR	Confirmed
Purity	HPLC	99.092%
Loss On Drying	TGA	0.1752%
Assay		98.9%

Comment:

The calculation of the 100% 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: Aug 26, 2025

Date: Aug 26, 2025

Date: Aug 26, 2025

