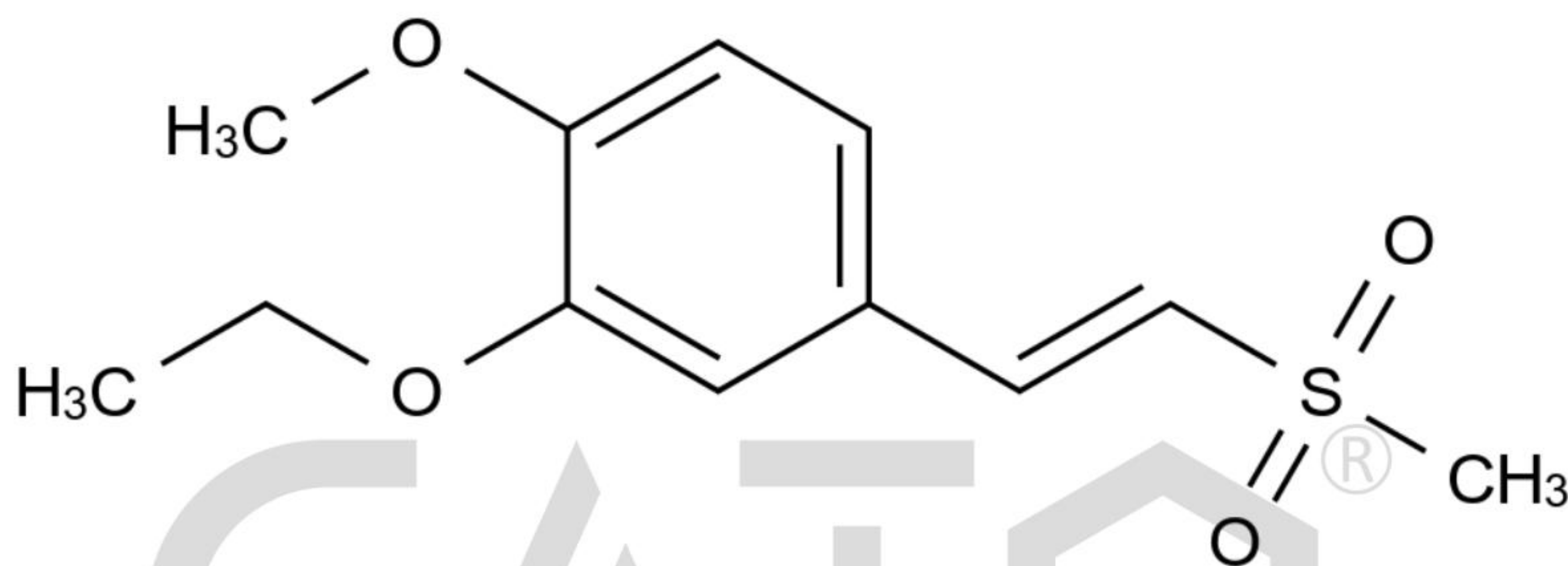


Certificate of Analysis

Reference Material

Product Name:	Apremilast Impurity 31	Catalogue Number:	C4X-100931
Chemical Name:	N/A	Lot Number:	0616-RE-0023
CAS Number:	1831833-38-5	Expiry Date:	Jun 12, 2026
Molecular Formula:	C ₁₂ H ₁₆ O ₄ S	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	256.32		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	97.950%
Water Content	Karl Fischer	0.35%
Residual Solvents	NMR	0.49% dichloromethane
Assay		97.1%

Comment:

The calculation of the 100% 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:

Nacy

Reviewed by:

Debia

Aporoved by General manager:

David

Date: Jun 13, 2023

Date: Jun 19, 2023

Date: Jun 19, 2023

