

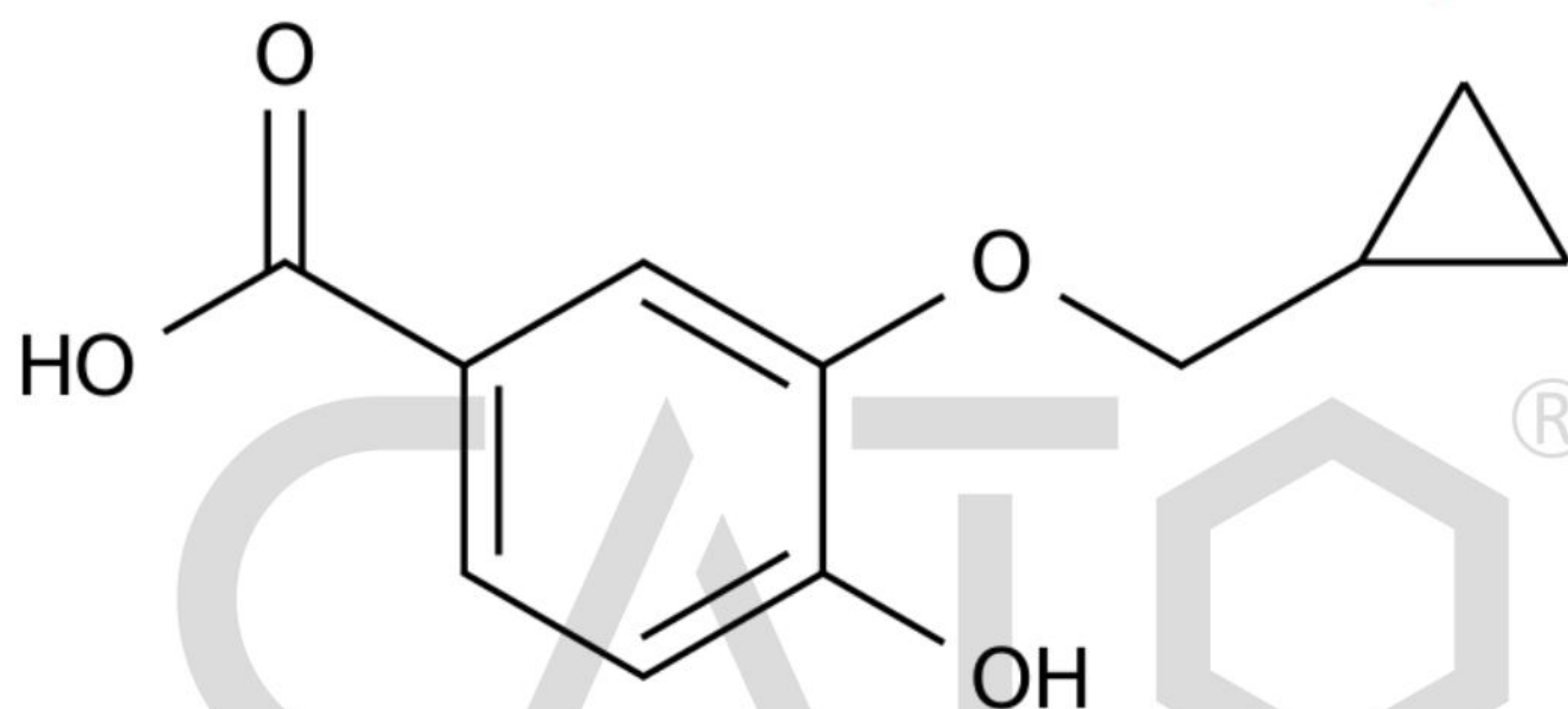
# Certificate of Analysis

## Reference Material & Standard

|                    |                                                |                   |                                           |
|--------------------|------------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Roflumilast impurity 25                        | Catalogue Number: | C4X-108425                                |
| Synonyms:          | N/A                                            | Lot Number:       | 0728-RG-0066                              |
| CAS Number:        | 1243391-44-7                                   | Expiry Date:      | Jul 29, 2029                              |
| Molecular Formula: | C <sub>11</sub> H <sub>12</sub> O <sub>4</sub> | Storage:          | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 208.21                                         | Warning:          |                                           |



Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&IR&UV&HNMR   | Confirmed   |
| Purity         | HPLC              | 99.331%     |
| Loss On Drying | TGA               | 0.3791%     |
| Assay          |                   | 99.0%       |

## Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity HPLC (\%)} / 100\%$

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 30, 2025

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