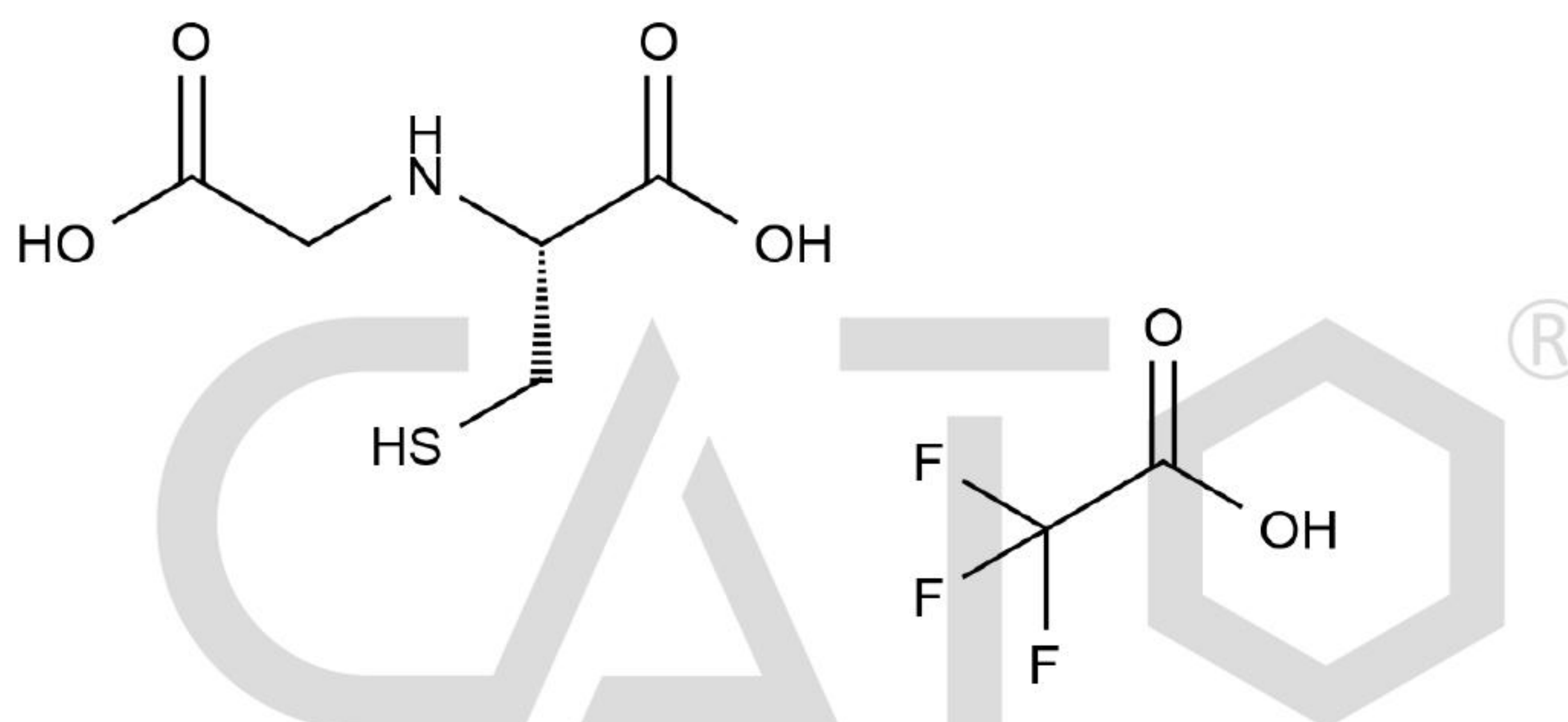


# Certificate of Analysis

## Reference Material & Standard

|                           |                                                                                               |                            |                                           |
|---------------------------|-----------------------------------------------------------------------------------------------|----------------------------|-------------------------------------------|
| <b>Product Name:</b>      | Carbocysteine Impurity 54 TFA                                                                 | <b>Catalogue Number:</b>   | C4X-201054                                |
| <b>Synonyms:</b>          | N/A                                                                                           | <b>Lot Number:</b>         | 0527-RH-0031                              |
| <b>CAS Number:</b>        | 21885-10-9(free base)                                                                         | <b>Expiry Date:</b>        | May 28, 2030                              |
| <b>Molecular Formula:</b> | C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub> S C <sub>2</sub> HF <sub>3</sub> O <sub>2</sub> | <b>Storage:</b>            | -20°C±5°C Protected from light and Sealed |
| <b>Molecular Weight:</b>  | 179.19 114.02                                                                                 | <b>Shipping Condition:</b> | Shipping with Ice Packs                   |

Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&CNMR&HNMR    | Confirmed   |
| Purity         | HPLC              | 95.9416%    |
| Loss on Drying | TGA               | 6.064%      |
| Assay          |                   | 90.1%       |

## 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:

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Reviewed by:

*Lisa*

Approved by General Manager:

*David*

Date: Aug 21, 2026

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Date: Aug 21, 2026



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