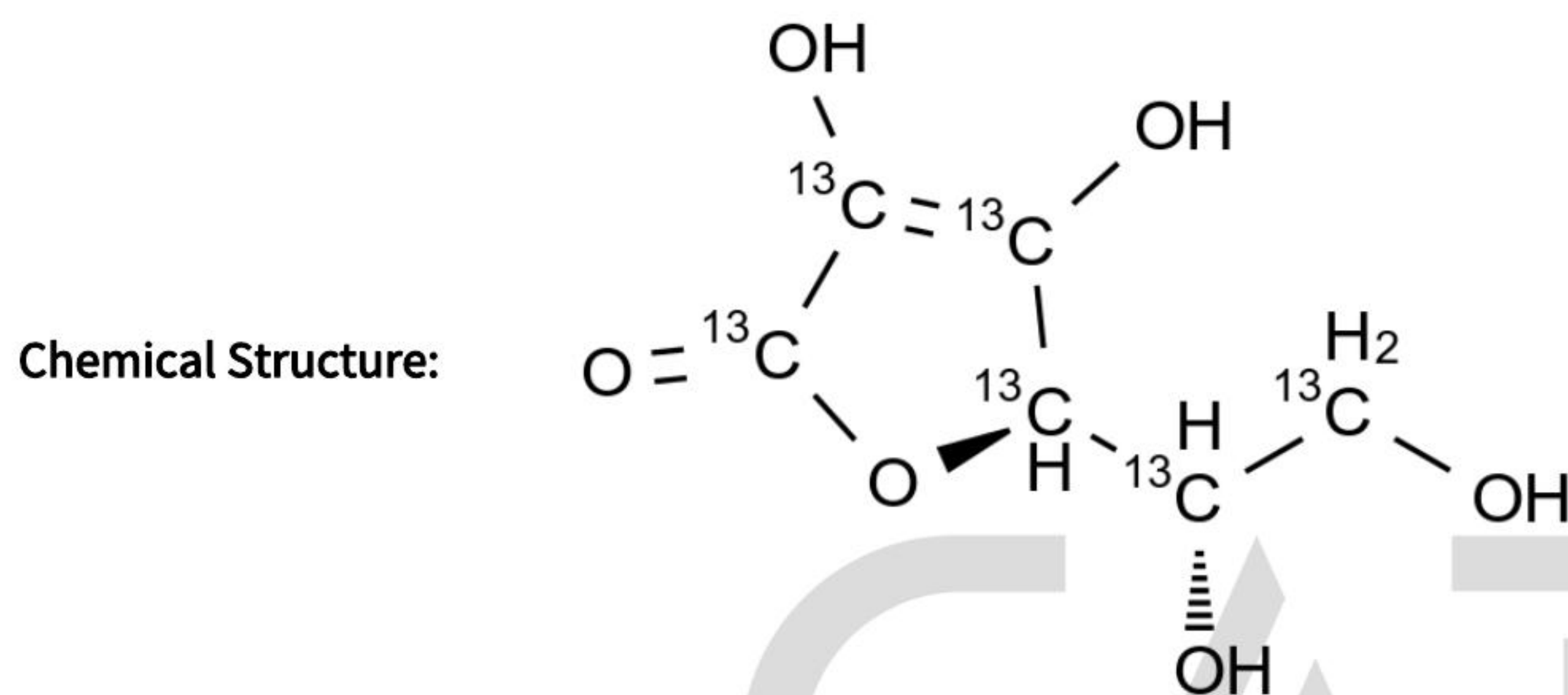


# Certificate of Analysis

## Reference Material

|                    |                    |                   |                                           |
|--------------------|--------------------|-------------------|-------------------------------------------|
| Product Name:      | Ascorbic acid 13C6 | Catalogue Number: | C4X-177938                                |
| Chemical Name:     | N/A                | Lot Number:       | 0908-RD-0015                              |
| CAS Number:        | 1354064-87-1       | Expiry Date:      | Apr 18, 2025                              |
| Molecular Formula: | [13C]6H8O6         | Storage:          | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 182.08             |                   |                                           |



| Test Items        | Method            | Results                                       |
|-------------------|-------------------|-----------------------------------------------|
| Appearance        | Visual inspection | White to Off-White Solid                      |
| Identification    | LCMS&IR&HNMR      | Confirmed                                     |
| Chemical Purity   | HPLC              | 99.6%                                         |
| Isotopic Purity   |                   | 98.7%                                         |
| Residual Solvents | NMR               | Not detected in NMR                           |
| Optical Rotation  |                   | $[\alpha]_{D25.0}(c=0.30, H_2O): +26.7^\circ$ |
| Assay             | qNMR              | 98.3%                                         |

## Comment:

Assay was determined by quantitative  $^1H$ -NMR.

## Signature:

Prepared by:

*Hinlam*

Reviewed by:

*Xenia*

Aporoved by General manager:

*David*

Date: Apr 18, 2022

Date: Sep 13, 2022

Date: Sep 13, 2022

Tel: +86-20-81960175

Fax: +86-20-81717260

Email: supports@cato-chem.com

Web: www.cato-chem.com

Add: Room 101, Building B, No.179, Guangpu East Road, Huangpu District, Guangzhou(Location: Room 301, Room 401, Room 501)

