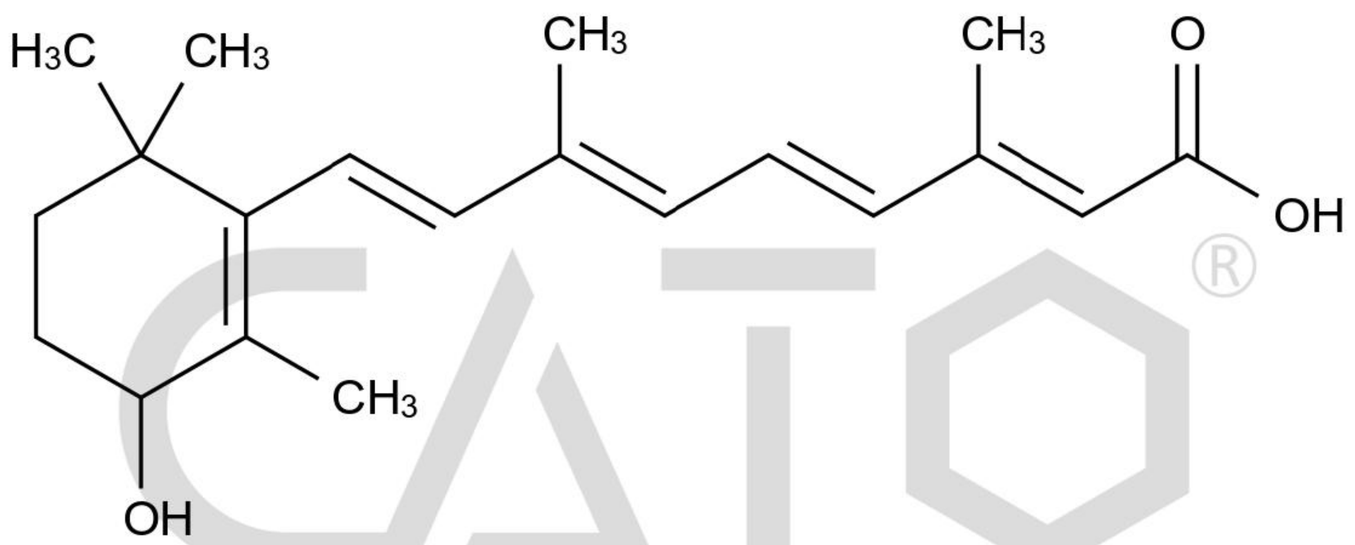
# Certificate of Analysis

## Reference Material & Standard

| | | | |
|---|---|---|---|
| **Product Name:** | 4-Hydroxy-all-trans-Retinoic Acid | **Catalogue Number:** | C4X-196913 |
| **Synonyms:** | N/A | **Lot Number:** | 0821-RF-0020 |
| **CAS Number:** | 66592-72-1 | **Expiry Date:** | Aug 26, 2027 |
| **Molecular Formula:** | $C_{20}H_{28}O_3$ | **Storage:** | -20°C±5°C Protected from light and Sealed |
| **Molecular Weight:** | 316.43 | **Shipping Condition:** | Shipping with Ice Packs |

**Chemical Structure:**




| Test Items | Method | Results |
|---|---|---|
| **Appearance** | Visual inspection | Yellow Solid |
| **Identification** | LCMS&HNMR | Confirmed |
| **Purity** | HPLC | 97.3% |
| **Assay** | qNMR | 72.7% |

CATO Research Chemicals Inc.

## Comment:

*Assay was determined by quantitative 1H-NMR.*

**Signature:**

Prepared by: Alice Date: Aug 27, 2024

Reviewed by: Koi Date: Aug 27, 2024

Approved by General Manager: David Date: Aug 27, 2024

CATO Research Chemicals Inc.