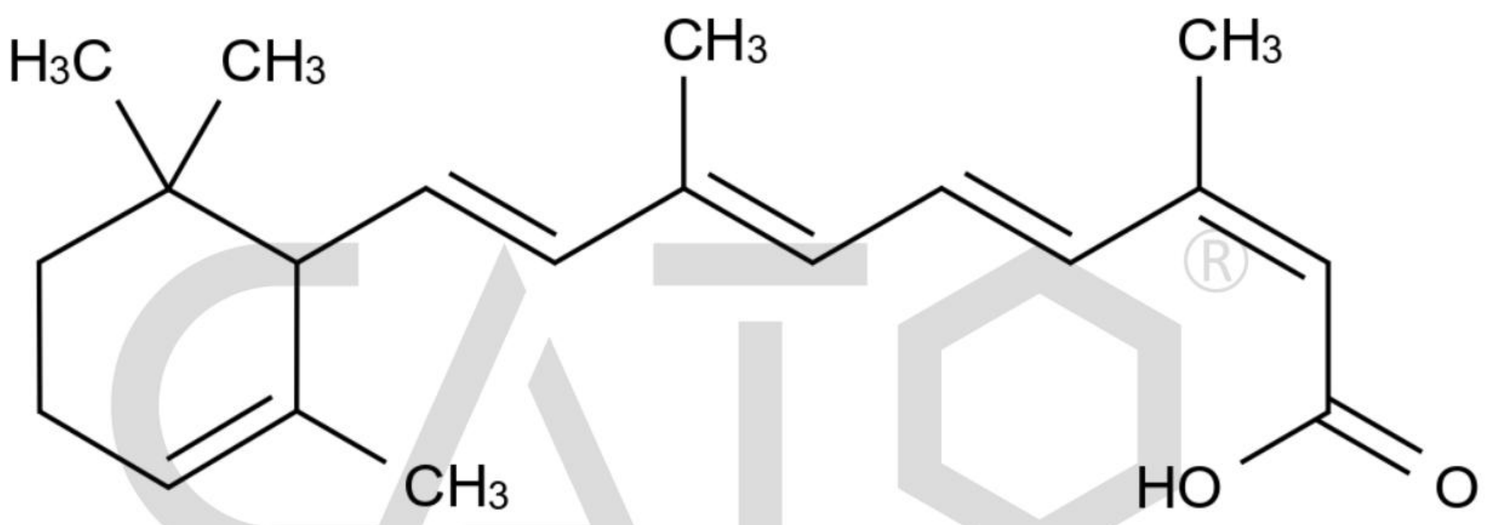
# Certificate of Analysis

## Reference Material & Standard

| | | | |
|---|---|---|---|
| **Product Name:** | Tretinoin Impurity 27 | **Catalogue Number:** | C4X-196927 |
| **Synonyms:** | N/A | **Lot Number:** | 1108-RH-0071 |
| **CAS Number:** | N/A | **Expiry Date:** | Nov 16, 2030 |
| **Molecular Formula:** | $C_{20}H_{28}O_2$ | **Storage:** | -20°C±5°C Protected from light and Sealed |
| **Molecular Weight:** | 300.44 | **Shipping Condition:** | Shipping with Ice Packs |
| **Solubility:** | Acetonitrile | | |

**Chemical Structure:**




| Test Items | Method | Results |
|---|---|---|
| **Appearance** | Visual inspection | Yellow Solid |
| **Identification** | LCMS&IR&UV&HNMR | Confirmed |
| **Purity** | HPLC | 98.466% |
| **Loss on Drying** | TGA | 2.2142% |
| **Assay** | Mass Balance | 96.3% |

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## 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: Alice Date: Nov 17, 2026

Reviewed by: Lisa Date: Nov 17, 2026

Approved by General Manager: David Date: Nov 17, 2026

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