

# Certificate of Analysis

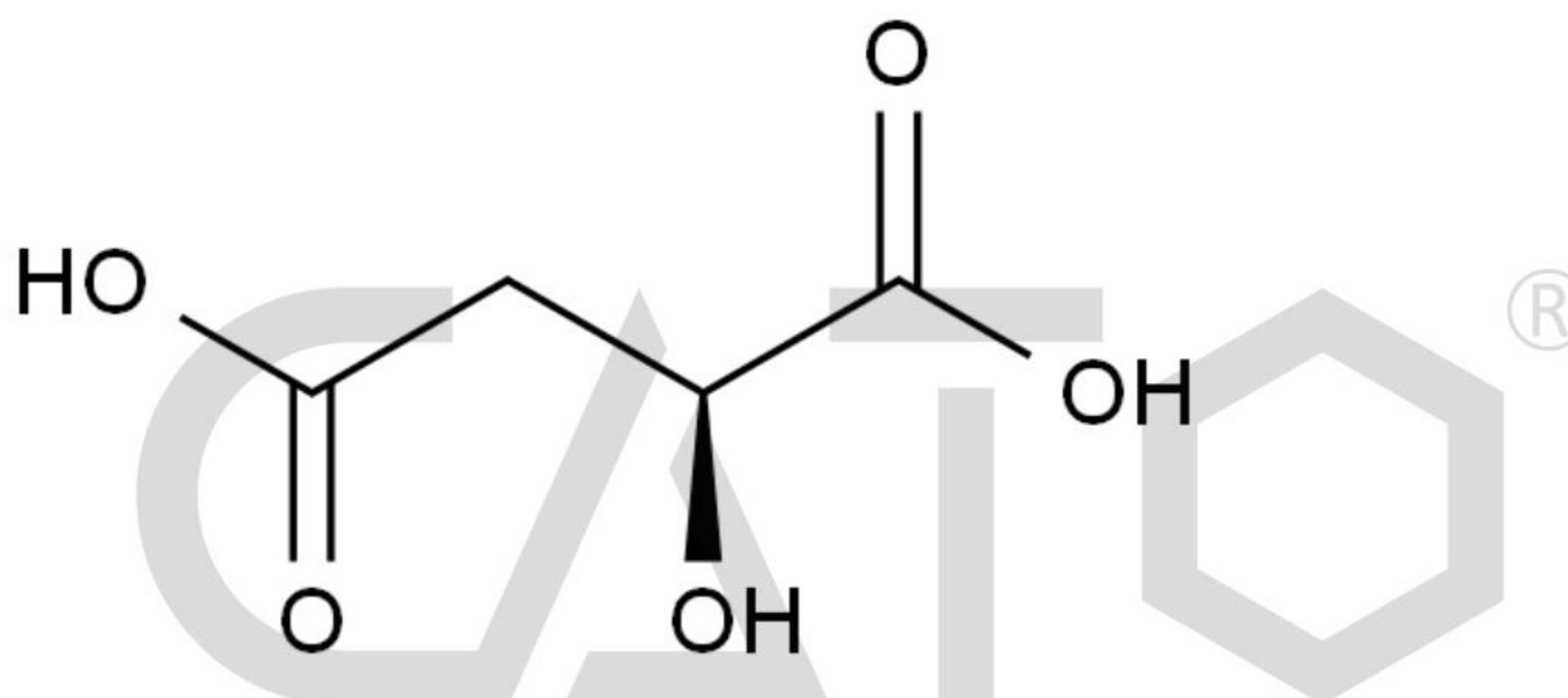
## Reference Material & Standard

|                    |                                              |                     |                                           |
|--------------------|----------------------------------------------|---------------------|-------------------------------------------|
| Product Name:      | L-(-)-Malic Acid                             | Catalogue Number:   | CCHM700208                                |
| Synonyms:          | N/A                                          | Lot Number:         | 0515-RE-0028                              |
| CAS Number:        | 97-67-6                                      | Expiry Date:        | Aug 18, 2030                              |
| Molecular Formula: | C <sub>4</sub> H <sub>6</sub> O <sub>5</sub> | Storage:            | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 134.09                                       | Shipping Condition: | Shipping at Room Temperature              |

Warning:



Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&CNMR&HNMR    | Confirmed   |
| Purity         | ELSD              | 100.0%      |
| Assay          | qNMR              | 98.3%       |
| Uncertainty    |                   | ±0.5%       |

## Comment:

The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Lisa

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Aug 19, 2026

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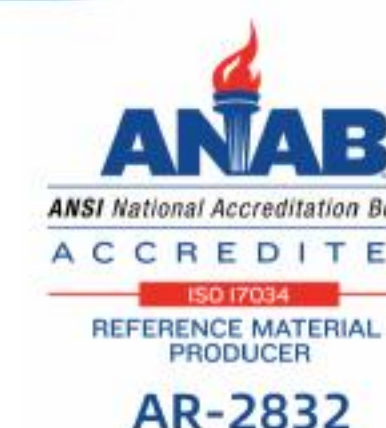
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