

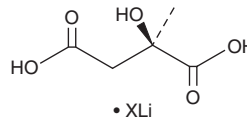
# PRODUCT INFORMATION



## D-(-)-Citramalic Acid (lithium salt)

Item No. 19260

**Formal Name:** (2R)-2-hydroxy-2-methylbutanedioic acid, monolithium salt  
**Synonyms:** (R)-Citramalate, 2-Methylmalic Acid  
**MF:** C<sub>5</sub>H<sub>8</sub>O<sub>5</sub> • XLi  
**FW:** 148.1  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

D-(-)-Citramalic acid (lithium salt) is supplied as a crystalline solid. Aqueous solutions of D-(-)-citramalic acid (lithium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of D-(-)-citramalic acid (lithium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

D-(-)-Citramalic acid (lithium salt) is a biochemical intermediate involved in the anaerobic metabolism of glutamate through the methylaspartate pathway of *C. tetanomorphum*.<sup>1,2</sup> It also plays various roles in other aspects of bacterial metabolism.<sup>3</sup>

### References

1. Howell, D.M., Xu, H., and White, R.H. (R)-Citramalate synthase in methanogenic archaea. *J. Bacteriol.* **181**(1), 331-333 (1999).
2. Buckel, W. and Barker, H.A. Two pathways of glutamate fermentation by anaerobic bacteria. *J. Bacteriol.* **117**(3), 1248-1260 (1974).
3. Friedmann, S., Alber, B.E., and Fuchs, G. Properties of succinyl-coenzyme A:D-citramalate coenzyme A transferase and its role in the autotrophic 3-hydroxypropionate cycle of *Chloroflexus aurantiacus*. *J. Bacteriol.* **188**(18), 6460-6468 (2006).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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