

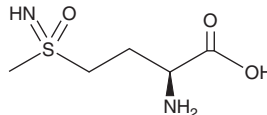
# PRODUCT INFORMATION



## L-Methionine-(S,R)-Sulfoximine

Item No. 27608

**CAS Registry No.:** 15985-39-4  
**Formal Name:** 2S-amino-4-(S-methylsulfonylimidoyl)-butanoic acid  
**MF:** C<sub>5</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>S  
**FW:** 180.2  
**Purity:** ≥95%  
**Supplied as:** A 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

L-Methionine-(S,R)-sulfoximine is supplied as a solid. Aqueous solutions of L-methionine-(S,R)-sulfoximine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of L-methionine-(S,R)-sulfoximine in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

L-Methionine-(S,R)-sulfoximine is an inhibitor of glutamine synthetase and a sulfoximine derivative of L-methionine.<sup>1</sup> It inhibits pea glutamine synthetase by 31 to 64% when used at concentrations ranging from 5 to 25 μM following preincubation with L-glutamine, an effect that is absent without L-glutamine preincubation. It also inhibits glutamine synthetase in isolated chick embryo retinas.<sup>2</sup>

### References

1. Sinden, S.L. and Durbin, R.D. Glutamine synthetase inhibition: Possible mode of action of wildfire toxin from *Pseudomonas tabaci*. *Nature* **219**(5152), 379-380 (1968).
2. Reif-Lehrer, L. and Coghlin, J. Conversion of glutamic acid to glutamine by retinal glutamine synthetase. *Exp. Eye Res.* **17**(4), 321-328 (1973).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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