

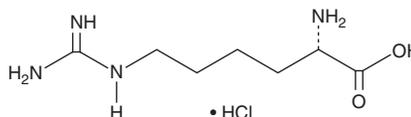
PRODUCT INFORMATION



L-Homoarginine (hydrochloride)

Item No. 22285

CAS Registry No.: 1483-01-8
Formal Name: N⁶-(aminoiminomethyl)-L-lysine, monohydrochloride
Synonym: NSC 145416
MF: C₇H₁₆N₄O₂ • HCl
FW: 224.7
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

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

Description

L-Homoarginine is an uncompetitive and organ-specific inhibitor of alkaline phosphatases.¹ This non-essential amino acid inhibits human bone and liver alkaline phosphatases but has no effect on placental or intestinal isoenzymes. *In vitro*, L-homoarginine inhibits [³H]thymidine uptake by mouse myeloma MOPC 104E cells and inhibits proliferation of C3H/He mouse osteosarcoma cells.² Pre-treatment with L-homoarginine delays *in vivo* tumor growth in a murine C3H/He osteosarcoma model. It also inhibits high-protein diet-induced pancreatic growth and enzyme secretion in bile-pancreatic juice-diverted rats, a model for the induction of pancreatic enzyme secretion with hypercholecystokininemia.³

References

1. Lin, C.W. and Fishman, W.H. L-Homoarginine. An organ-specific, uncompetitive inhibitor of human liver and bone alkaline phosphohydrolases. *J. Biol. Chem.* **247(10)**, 3082-3087 (1972).
2. Kikuchi, Y., Takagi, M., Parmley, R.T., *et al.* Inhibitory effect of L-homoarginine on murine osteosarcoma cell proliferation. *Cancer Res.* **42(3)**, 1072-1077 (1982).
3. Hira, T., Ohyama, S., and Hara, H. L-homoarginine suppresses exocrine pancreas in rats. *Amino Acids* **24(4)**, 389-396 (2003).

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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