# PRODUCT INFORMATION

## D-Ornithine lactam

*Item No. 31680*

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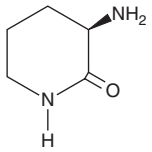
|---|---|
| **CAS Registry No.:** | 88763-76-2 |
| **Formal Name:** | (3R)-3-amino-2-piperidinone |
| **Synonym:** | (R)-3-Aminopiperidin-2-one |
| **MF:** | $C_5H_{10}N_2O$ |
| **FW:** | 114.1 |
| **Purity:** | ≥95% |
| **Supplied as:** | A solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




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

### Laboratory Procedures

D-Ornithine lactam is supplied as a solid. A stock solution may be made by dissolving the D-ornithine lactam in the solvent of choice, which should be purged with an inert gas. D-Ornithine lactam is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of D-ornithine lactam in these solvents is approximately 10 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of D-ornithine lactam can be prepared by directly dissolving the solid in aqueous buffers. The solubility of D-ornithine lactam 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-Ornithine lactam is a building block.[1,2] It has been used in the synthesis of hepatitis C virus (HCV) non-structural protein 5B (NS5B) inhibitors, as well as αVβ3 integrin receptor antagonists.

### References


1. Li, P., Dorsch, W., Lauffer, D.J., *et al.* Discovery of novel allosteric HCV NS5B inhibitors. 2. Lactam-containing thiophene carboxylates. *ACS Med. Chem. Lett.* **8(2)**, 251-255 (2017).
2. Kubota, D., Ishikawa, M., Ishikawa, M., *et al.* Tricyclic pharmacophore-based molecules as novel integrin $\alpha_v\beta_3$ antagonists. Part IV: Preliminary control of $\alpha_v\beta_3$ selectivity by *meta*-oriented substitution. *Bioorg. Med. Chem.* **14(12)**, 4158-4181 (2006).





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