# PRODUCT INFORMATION



## **DL-Tryptophan**

Item No. 31210

CAS Registry No.: 54-12-6

Synonyms: NSC 13118, (±)-Tryptophan,

(R,S)-Tryptophan

MF:  $C_{11}H_{12}N_2O_2$ FW: 204.2 **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 219 nm A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

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

# **Laboratory Procedures**

DL-Tryptophan is supplied as a crystalline solid. Aqueous solutions of DL-tryptophan can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of DL-tryptophan in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

DL-Tryptophan is a racemic mixture of the atypical amino acid D-tryptophan and the essential amino acid L-tryptophan (Item No. 29600).<sup>1,2</sup> Serum levels of DL-tryptophan are negatively correlated with urinary protein levels in a rat model of nephropathy induced by doxorubicin (Item No. 15007).<sup>3</sup>

#### References

- 1. Grishin, D.V., Zhdanov, D.D., Pokrovskaya, M.V., et al. D-amino acids in nature, agriculture and biomedicine. All Life 13(1), 11-22 (2020).
- 2. Richard, D.M., Dawes, M.A., Mathias, C.W., et al. L-Tryptophan: Basic metabolic functions, behavioral research and therapeutic indication. Int. J. Tryptophan Res. 2, 45-60 (2009).
- Li, A.-P., Yang, L., Zhang, L.-C., et al. Evaluation of injury degree of adriamycin-induced nephropathy in rats based on serum metabolomics combined with proline marker. J. Proteome Res. 19(7), 2575-2584 (2020).

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

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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#### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM