

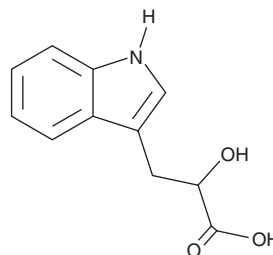
# PRODUCT INFORMATION



## Indole-3-lactic Acid

Item No. 37534

**CAS Registry No.:** 1821-52-9  
**Formal Name:** α-hydroxy-1H-indole-3-propanoic acid  
**Synonyms:** DL-Indole-3-lactic Acid, ILA  
**MF:** C<sub>11</sub>H<sub>11</sub>NO<sub>3</sub>  
**FW:** 205.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 222 nm  
**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

Indole-3-lactic acid is supplied as a solid. A stock solution may be made by dissolving the indole-3-lactic acid in the solvent of choice, which should be purged with an inert gas. Indole-3-lactic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of indole-3-lactic acid in these solvents is approximately 2, 3, and 10 mg/ml, respectively.

### Description

Indole-3-lactic acid is a metabolite of tryptophan (Item Nos. 31210 | 29600).<sup>1</sup> It is formed from tryptophan by gut microbiota. Indole-3-lactic acid (0.1-10 mM) inhibits LPS-induced production of IL-8 in Caco-2 intestinal epithelial cells. It reduces colon tumor number and size in cancer-prone *Apc*<sup>+/Min</sup> mice when administered at a dose of 20 mg/kg.<sup>2</sup>

### References

1. Ehrlich, A.M., Pacheco, A.R., Henrick, B.M., *et al.* Indole-3-lactic acid associated with *Bifidobacterium*-dominated microbiota significantly decreases inflammation in intestinal epithelial cells. *BMC Microbiol.* **20**(1), 357 (2020).
2. Sugimura, N., Li, Q., Chu, E.S.H., *et al.* *Lactobacillus gallinarum* modulates the gut microbiota and produces anti-cancer metabolites to protect against colorectal tumorigenesis. *Gut* **71**(10), 2011-2021 (2021).

#### 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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