



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

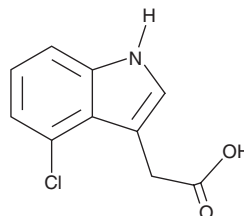
# PRODUCT INFORMATION



## 4-Chloroindole-3-acetic Acid

Item No. 35534

**CAS Registry No.:** 2519-61-1  
**Formal Name:** 4-chloro-1H-indole-3-acetic acid  
**Synonyms:** 4-Cl-IAA, 4-chloro IAA, 4-Chloroindoleacetic Acid, NSC 295294  
**MF:** C<sub>10</sub>H<sub>8</sub>ClNO<sub>2</sub>  
**FW:** 209.6  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 223 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Synthetic



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

### Laboratory Procedures

4-Chloroindole-3-acetic acid (4-Cl-IAA) is supplied as a solid. A stock solution may be made by dissolving the 4-Cl-IAA in the solvent of choice, which should be purged with an inert gas. 4-Cl-IAA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4-Cl-IAA in DMSO is approximately 14 mg/ml and approximately 16 mg/ml in ethanol 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 4-Cl-IAA can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 4-Cl-IAA in PBS (pH 7.2) is approximately 0.20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

4-Cl-IAA is a halogenated plant auxin plant growth regulator that has been found in *P. sativum*.<sup>1</sup> It induces tobacco callus growth and biologically active alkaloid production in *Duboisia* root cultures when used at a concentration of 0.1 mg/ml. 4-Cl-IAA (1 μM) reduces heat stress-induced grain loss in wheat (*T. aestivum*).<sup>2</sup>

### References

1. Reinecke, D.M. 4-Chloroindole-3-acetic acid and plant growth. *Plant Growth Regul.* **27**, 3-13 (1999).
2. Abeyasingha, D.N., Ozga, J.A., Strydhorst, S., et al. The effect of auxins on amelioration of heat stress-induced wheat (*Triticum aestivum* L.) grain loss. *J. Agron. Crop. Sci.* **207(6)**, 970-983 (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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/12/2022

#### 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