

### 5-Ph-IAA: Inducer for Auxin Inducible Degron 2 System

30-003 10 mg

30-003-10 100 mg

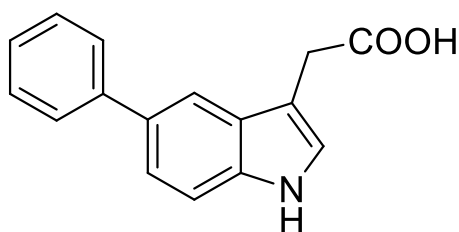
**Shipping and Storage:** Ship at ambient temperature or at 4 °C or below. Make stock solution, aliquot and store at -20 °C or below.

**Stock solution:** Make 100mM stock solution by resolving 10 mg 5-Ph-IAA in 400  $\mu$ L solvents, such as DMSO and store the stock solution at -20 °C for a year or at -80°C for longer period.

**Usage:** 5-Ph-IAA induces degradation of degron-fused protein in Auxin Inducible Degron 2 system. For inducing degradation in cell culture, use a stock solution dissolved in DMSO. 5-Ph-IAA typically works at less than 1  $\mu$ M. For mice, use a 5-Ph-IAA solution dissolved in PBS. It typically works less than 10 mg/kg by intraperitoneal injection. For detail protocol, see Reference.

<b>Product name:</b>	5-Ph-IAA
<b>Chemical name:</b>	5-Phenyl-1H-indole-3-acetic acid
<b>CAS Registry Number:</b>	168649-23-8
<b>Chemical Formula:</b>	C <sub>16</sub> H <sub>13</sub> NO <sub>2</sub>
<b>Molecular Weight:</b>	251.28
<b>Purity:</b>	>98% as determined with HPLC

Molecular structure of 5-Ph-IAA, Inducer for Auxin Inducible Degron 2 system



5-Ph-IAA

**Patents:** The use of this material in the “Auxin-Inducible Degron System” is subject to patent technology held by the Research Organization of Information and Systems, NATIONAL INSTITUTE OF GENETICS (NIG/ROIS) and Kake Educational Institution (KEI), and the researchers in profit companies must obtain the license from NIG/ROIS and KEI. Contact : [chizai@nig.ac.jp](mailto:chizai@nig.ac.jp) (NIG INNOVATION, National Institute of Genetics, Japan)

**Reference (Protocol)**

Yesbolatova A et al. The Auxin-Inducible Degron 2 technology provides sharp degradation control in yeast, mammalian cells, and mice. Nat Commun. 2020 11: 5701. PMID: [33177522](https://pubmed.ncbi.nlm.nih.gov/33177522/)

**This product is to be used for research purpose only, not in human.**

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product name:** 5-Ph-IAA

**Chemical name:** 5-Phenyl-1H-indole-3-acetic acid

**Product code:** 30-003. 30-003-10

**Supplier:** BioAcademia Inc.

**Address:** North Buiding, Research Institute for Microbial Diseases, Osaka University, 3-1 Yamadaoka, Suita, Osaka 565-0871, Japan

**Telephone:** 81-6-6877-2335 **Fax:** 81-6-6877-2336

**E-mail:** info@bioacademia.co.jp

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture:** Substance

**PHYSICAL HAZARDS:** Not classified

**HEALTH HAZARDS:** Not classified

**ENVIRONMENTAL HAZARDS:** Not classified

**Label elements**

**Pictograms or hazard symbols:** None

**Signal word:** No signal word

**Hazard statements:** None

**Precautionary statements:** None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture:** Substance

**CAS Registry Number:** 168649-23-8

**Chemical Formula:** C<sub>16</sub>H<sub>13</sub>NO<sub>2</sub>

**Molecular Weight:** 251.28

**Notice Through Official Gazettes Reference Number**

**ENCS:** Not Listed

### 4. FIRST-AID MEASURES

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.

**Specific hazards arising from the chemical:** Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

## 6. HANDLING AND STORAGE

### Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment.

Prevent dispersion of dust. Wash hands and face thoroughly after handling.

Use a local exhaust if dust or aerosol will be generated.

**Advice on safe handling:** Avoid contact with skin, eyes and clothing

## 7. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath

**Control parameters:** Not set up

### Personal protective equipment

**Respiratory protection:** Dust respirator. Follow local and national regulations.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses.

**Skin and body protection:** Protective clothing.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state (20°C):** Solid

**Form:** Crystal- Powder

**Color:** Colorless to Pale yellow.

**Odor:** No data available

**pH:** No data available

### Flammability or explosive limits:

**Lower:** No data available

**Upper:** No data available

**Relative density:** No data available

**Solubility(ies): [Water]** No data available,

**[Other solvents] Soluble:** methanol, acetone, DMSO, DMF

## 9. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under proper conditions.
<b>Possibility of hazardous reactions:</b>	No special reactivity has been reported.
<b>Incompatible materials:</b>	Oxidizing agents
<b>Hazardous decomposition products:</b>	Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO <sub>x</sub> )

## 10. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	No data available
<b>Skin corrosion/irritation:</b>	No data available
<b>Serious eye damage/irritation:</b>	No data available
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	
<b>IARC =</b>	No data available
<b>NTP =</b>	No data available
<b>Reproductive toxicity:</b>	No data available

## 11. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	
<b>Fish:</b>	No data available
<b>Crustacea:</b>	No data available
<b>Algae:</b>	No data available
<b>Persistence / degradability:</b>	No data available
<b>Bioaccumulative potential(BCF):</b>	No data available
<b>Mobility in soil</b>	
<b>Log Pow:</b>	No data available
<b>Soil adsorption (K<sub>oc</sub>):</b>	No data available
<b>Henry's Law constant(PaM<sup>3</sup>/mol):</b>	No data available

## 12. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## 13. TRANSPORT INFORMATION

**Hazards Class:** Does not correspond to the classification standard of the United Nations  
**UN-No:** Not listed

#### **14. REGULATORY INFORMATION**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, or have known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

#### **15. OTHER INFORMATION**

This MSDS is correct to the best of our knowledge at the date of publication but does not purport to be all inclusive and shall be used only as a guide. It must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The burden of safe use of this material rests entirely with the user. Bioacademia Inc. shall not be held liable for any injury or damage resulting from handling or from contact with the above product.

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