

Product Name: FICZ

Catalog No.: 5304

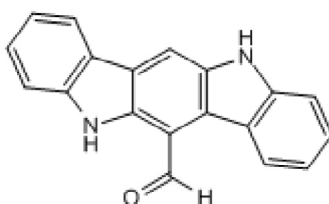
Batch No.: 9

CAS Number: 172922-91-7

IUPAC Name: 5,11-Dihydroindolo[3,2-b]carbazole-6-carboxaldehyde

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₂N₂O
Batch Molecular Weight: 284.31
Physical Appearance: Brown solid
Solubility: DMSO to 25 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 96.9% purity
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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CAS Number: 172922-91-7

IUPAC Name: 5,11-Dihydroindolo[3,2-b]carbazole-6-carboxaldehyde

Description:

FICZ is a high affinity aryl hydrocarbon receptor (AhR) agonist ($K_d = 70$ pM). Proposed to be an endogenous AhR ligand. Induces transient expression of cytochrome P450-1A1 (CYP1A1) in vitro.

Physical and Chemical Properties:

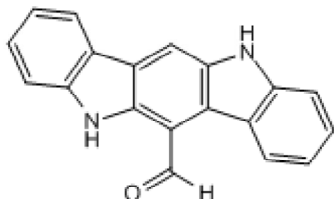
Batch Molecular Formula: C₁₉H₁₂N₂O

Batch Molecular Weight: 284.31

Physical Appearance: Brown solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

Solubility & Usage Info:

DMSO to 25 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Moura-Alves et al (2014) AhR sensing of bacterial pigments regulates antibacterial defence. *Nature* **512** 387. PMID: 25119038.

Wincent et al (2009) The suggested physiologic aryl hydrocarbon receptor activator and cytochrome P4501 substrate 6-formylindolo [3,2-b]carbazole is present in humans. *J.Biol.Chem.* **284** 2690. PMID: 19054769.

Rannug et al (1995) Structure elucidation of two tryptophan-derived, high affinity Ah receptor ligands. *Chem.Biol.* **2** 841. PMID: 8807817.

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