

## 3-Cyano-7-ethoxycoumarin

**Cat:** IC6390

**Storage:** Powder: 2-8°C, 2 years; Insolvent (mother liquid): -20°C, 6 months; -80°C, 1 year (protect from light)

### Introduction

The 3-Cyano-7-ethoxycoumarin is widely used to monitor P450 activity in cell extracts and solutions. Cytochrome P450 oxidase (CYP450) is a member of the hemoglobin superfamily, which is the terminal oxidase of the endoplasmic reticulum membrane mixed function oxidase system. It is an important and evolutionarily related oxidase in animal, plant, and bacterial physiology.

### Parameters

Ex/Em: 408/450nm

CAS: 117620-77-6

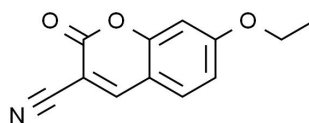
Molecular Formula: C<sub>12</sub>H<sub>9</sub>NO<sub>3</sub>

Molecular Weight: 215.2

Purity: ≥98%

Appearance: Yellow to orange Solid

Solubility: Soluble in DMSO ≥1mg/mL(Need ultrasonic)



### Protocols (only for reference)

#### Preparation of storage solution

Prepare a 5 mM stock solution in DMSO. For example, 1 mg of CEC powder was dissolved in 0.9294 mL of DMSO.

Solvent \ Concentration	Mass	1mg	5mg	10mg
	1mM		4.6468mL	23.2342mL
5mM		0.9294mL	4.6468mL	9.2937mL
10mM		0.4647mL	2.3234mL	4.6468mL

Note:

- Unused storage solution is recommended to be stored in portions at -20°C to avoid repeated freezing and thawing.
- Moisture-absorbing DMSO has a significant effect on the solubility of the product, use freshly opened DMSO.

#### Note

- Dilute the reservoir solution with a suitable buffer (e.g. serum-free medium or PBS, etc.) to formulate the CEC working solution.
- The final concentration of the working solution is recommended to be optimized according to different cell lines and experimental systems. Please adjust the concentration of the working

solution according to the actual situation, and use immediately after dissolution.

3. When it is found to be more difficult to dissolve, it can be properly sonicated to promote dissolution.
4. All fluorescent dyes have quenching problems, please try to avoid light to slow down the fluorescence quenching.
5. For your safety and health, please wear lab coat and disposable gloves.
6. This product is for scientific research use only. Do not use in medicine, clinical diagnosis or treatment, food and cosmetics. Do not store in ordinary residential areas.