

**Product Name:** Raphin 1

**Catalog No.:** 6760

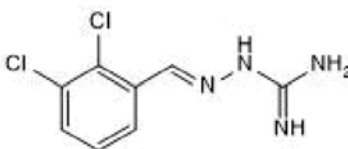
**Batch No.:** 1

CAS Number: 2022961-17-5

IUPAC Name: (2*E*)-2-[(2,3-Dichlorophenyl)methylene]hydrazinecarboximidamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>8</sub>H<sub>8</sub>Cl<sub>2</sub>N<sub>4</sub>  
**Batch Molecular Weight:** 231.08  
**Physical Appearance:** Pale yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 50 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	41.58	3.49	24.25
Found	41.61	3.43	24

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

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**Description:**

Inhibitor of the regulatory subunit PPP1R15B of protein phosphatase ( $K_d = 33$  nM). Displays >30-fold selectivity for PPP1R15B over PPP1R15A. Inhibits PPP1R15B-mediated dephosphorylation and protein synthesis in vitro. Induces transient reduction in protein synthesis in brains of wild type mice after single dose. Decreases SDS-insoluble huntingtin assemblies and nuclear inclusions in a mouse model of Huntington's disease. Orally bioavailable and brain penetrant.

**Physical and Chemical Properties:**

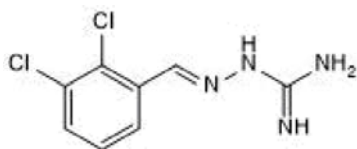
Batch Molecular Formula: C<sub>8</sub>H<sub>8</sub>Cl<sub>2</sub>N<sub>4</sub>

Batch Molecular Weight: 231.08

Physical Appearance: Pale yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Krzyzosiak et al** (2018) Target-based discovery of an inhibitor of the regulatory phosphatase PPP1R15B. *Cell*. **174** 1216. PMID: 30057111.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 50 mM

**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. Our standard recommendations are:

**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.

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