

**Product Name:** CX08005

**Catalog No.:** 6144

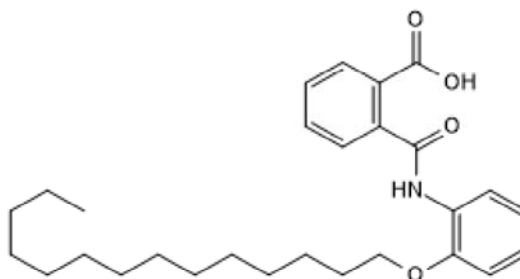
**Batch No.:** 1

CAS Number: 1256341-22-6

IUPAC Name: 2-[[[2-(Tetradecyloxy)phenyl]amino]carbonyl]benzoic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>28</sub>H<sub>39</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 453.61  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.5 (Ethyl acetate)  
**HPLC:** Shows 98.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	74.14	8.67	3.09
Found	74.13	8.79	2.92

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**Description:**

Competitive PTP1B inhibitor ( $IC_{50} = 0.781 \mu M$ ). Binds catalytic P-loop of enzyme. Improves insulin sensitivity in obese mice in the glucose tolerance test and the homeostasis model assessment of insulin resistance index (HOMA-IR). Enhances insulin-induced glucose uptake in adipocytes and myotubes in vitro. Exhibits some selectivity for PTP1B over other protein tyrosine phosphatases, except TCPTP.

**Physical and Chemical Properties:**

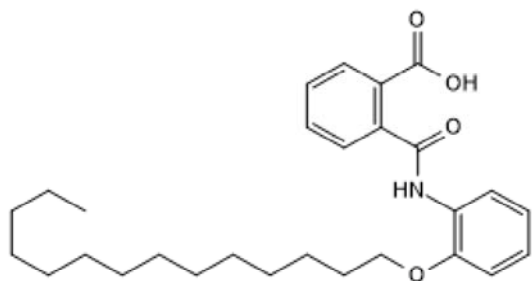
Batch Molecular Formula:  $C_{28}H_{39}NO_4$

Batch Molecular Weight: 453.61

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 100 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.

**References:**

Zhang *et al* (2016) A novel protein tyrosine phosphatase 1B inhibitor with therapeutic potential for insulin resistance. *Br.J.Pharmacol.* **173** 1939. PMID: 26990621.

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