PRODUCT INFORMATION



CX-08005

Item No. 42730

CAS Registry No.: 1256341-22-6

Formal Name: 2-[[[2-(tetradecyloxy)phenyl]amino]

carbonyl]-benzoic acid

MF: C₂₈H₃₉NO₄ FW: 453.6 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CX-08005 is supplied as a solid. A stock solution may be made by dissolving the CX-08005 in the solvent of choice, which should be purged with an inert gas. CX-08005 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

CX-08005 is an inhibitor of protein tyrosine phosphatase 1B (PTP1B; IC_{50} = 0.781 μ M).¹ It is selective for PTP1B over Src homology region 2 domain-containing phosphatase 1 (SHP-1), dual-specificity phosphatase 3 (DUSP3), and leukocyte common antigen-related (LAR) phosphatase at 10 μM but does inhibit T cell protein tyrosine phosphatase (TCPTP; $IC_{50} = 0.475 \mu M$). CX-08005 (100 and 200 mg/kg) decreases blood glucose levels in a glucose tolerance test in a mouse model of high-fat diet-induced obesity (DIO). It also increases red blood cell velocity and central and interlobular veins shear rates and decreases rolling and adhering leukocyte numbers in a mouse model of DIO when administered at a dose of 100 mg/kg.2 CX-08005 (50 mg/kg) decreases hepatic and plasma triglyceride levels in a KKAy mouse model of diabetes.

References

- 1. Zhang, X., Tian, J., Li, J., et al. A novel protein tyrosine phosphatase 1B inhibitor with therapeutic potential for insulin resistance. Br. J. Pharmacol. 173(12), 1939-1949 (2016).
- Li, J., Zhang, X., Tian, J., et al. CX08005, a protein tyrosine phosphatase 1B inhibitor, attenuated hepatic lipid accumulation and microcirculation dysfunction associated with nonalcoholic fatty liver disease. Pharmaceuticals (Basel). 16(1), 106 (2023).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 04/15/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM