Print Date: Jan 27th 2021

Certificate of Analysis

www.tocris.com

Product Name: **SR 202** **Catalog No.: 2022** **Batch No.: 1**

CAS Number: 76541-72-5

IUPAC Name: (4-Chlorophenyl)(dimethoxyphosphinyl)methyl phosphoric acid dimethyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{11}H_{17}ClO_7P_2$

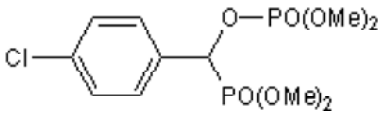
Batch Molecular Weight: 358.65

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.41 (Dichloromethane:Methanol [95:5])

HPLC: Shows >99.8% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	36.84	4.78	
Found	36.84	4.82	

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: SR 202 **Catalog No.:** 2022 **Batch No.:** 1

CAS Number: 76541-72-5

IUPAC Name: (4-Chlorophenyl)(dimethoxyphosphinyl)methyl phosphoric acid dimethyl ester

Description:

Selective PPARγ antagonist; antidiabetic and antiobesity agent. Attenuates troglitazone-induced PPARγ transcriptional activity (IC_{50} = 140 μM) without affecting ligand-stimulated PPARα, PPARβ or FXR transcriptional activity. Inhibits PPARγ-dependent adipocyte differentiation and growth in vitro and in vivo. Improves insulin sensitivity in diabetic ob/ob mice and increases HDL levels in rats in vivo.

Physical and Chemical Properties:

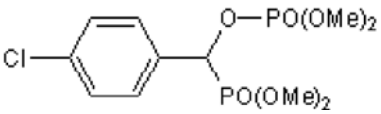
Batch Molecular Formula: $C_{11}H_{17}ClO_7P_2$

Batch Molecular Weight: 358.65

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water 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:

Doggrell (2003) Do peroxisome proliferation receptor-γ antagonists have clinical potential as combined antiobesity and antidiabetic drugs? Expert.Opin.Invest.Drugs ***12*** 713.

Rieusset *et al* (2002) A new selective peroxisome proliferator-activated receptor γ antagonist with antiobesity and antidiabetic activity. Mol.Endocrinol. ***16*** 2628. PMID: 12403851.

Nguyen *et al* (1987) *gem*-Diphosphonate and *gem*-phosphonate-phosphate compounds with specific high density lipoprotein inducing activity. J.Med.Chem. ***30*** 1426. PMID: 3612689.