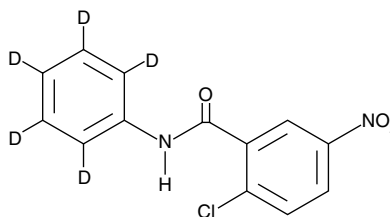


Product Information



GW 9662-d₅
Item No. 9000497

Formal Name: 2-chloro-5-nitrobenzanilide-10,11,12,13,14-d₅
MF: C₁₃H₄ClD₅N₂O₃
FW: 281.7
Chemical Purity: ≥98%
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 260 nm



Laboratory Procedures

GW 9662-d₅ contains five deuterium atoms at the 10, 11, 12, 13, and 14 positions. It is intended for use as an internal standard for the quantification of GW 9662 by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that GW 9662-d₅ be stored as supplied at -20°C. It should be stable for at least two years.

GW 9662-d₅ is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 9662-d₅ in an organic solvent purged with an inert gas. GW 9662-d₅ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GW 9662-d₅ in ethanol is approximately 2 mg/ml and approximately 33 mg/ml in DMSO and DMF.

GW 9662-d₅ is used as an internal standard for the quantification of GW 9662 by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

The peroxisome proliferator-activated receptor γ (PPAR γ) is the nuclear receptor responsible for transducing the therapeutic activity of the thiazolidinediones (TZDs). TZDs are a group of structurally related synthetic PPAR γ agonists with antidiabetic actions *in vivo*.^{1,2} Rosiglitazone is a prototypical TZD and has served as a reference compound for this class.³ There are many PPAR γ agonists, including 15-deoxy- $\Delta^{12,14}$ -prostaglandin J₂ and azelaoyl PAF, which are naturally derived.^{4,5} However, only a few antagonists have been reported.⁶ GW 9662 blocks the PPAR γ -induced differentiation of monocytes to osteoclasts by >90% at a dose of 0.1 μ M.⁶ It is therefore a much more potent antagonist than BADGE, which is another reported PPAR γ antagonist.⁷

References

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Related Products

For a list of related products please visit: www.caymanchem.com/catalog/9000497

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

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