PRODUCT INFORMATION

CAY10638
Item No. 13695

CAS Registry No.: 1221413-57-5
Formal Name: 5-[[4-[2-(2-thienyl)ethoxy]phenyl]methylene]-2,4-thiazolidinedione
Synonym: Thiazolidinedione derivative
MF: C₁₆H₁₃NO₃S₂
FW: 331.4
Purity: ≥98%
UV/Vis.: λ_max: 234, 343 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

CAY10638 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10638 in the solvent of choice, which should be purged with an inert gas. CAY10638 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CAY10638 in these solvents is approximately 25 and 30 mg/ml, respectively.

CAY10638 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10638 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10638 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandins have a short life in vivo because NAD⁺-dependent 15-hydroxy prostaglandin dehydrogenase (15-PGDH) catalyzes their oxidation to 15-keto metabolites with greatly reduced biological activity.¹ Thiazolidinediones (TZDs) are a class of PPARγ agonists that have potent 15-PGDH inhibitory activity.²,³ CAY10638 is a TZD derivative that inhibits 15-PGDH activity with an IC₅₀ value of 31 nM.³

References