Seratrodast
Item No. 9002014

CAS Registry No.: 112665-43-7
Formal Name: ζ(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)benzeneheptanoic acid
Synonyms: AA2414, A-73001, ABT-001
MF: C₂₂H₂₆O₄
FW: 354.4
Purity: ≥98%
UV/Vis.: λ_max: 267 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

**Laboratory Procedures**

Seratrodast is supplied as a crystalline solid. A stock solution may be made by dissolving the seratrodast in the solvent of choice. Seratrodast is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of seratrodast in ethanol is approximately 5 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Seratrodast is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, seratrodast should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Seratrodast has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

**Description**

Seratrodast is a potent antagonist of the thromboxane A₂ (TXA₂) receptor (TP), blocking specific binding of U-46619 (Item No. 16450) to guinea pig platelets with an IC₅₀ value of 7.4 nM and platelet aggregation induced by U-44069 (Item No. 16440) with an IC₅₀ value of 350 nM.¹² It is metabolized, in liver microsomes, by cytochrome P450 (CYP) isoforms 3A and 2C9/10, with a minor contribution from CYP2C8 and CYP2C19.³ Seratrodast is commonly used to study the roles of the TP receptor in animal airways and in tissue samples.¹⁴⁻⁶

**References**