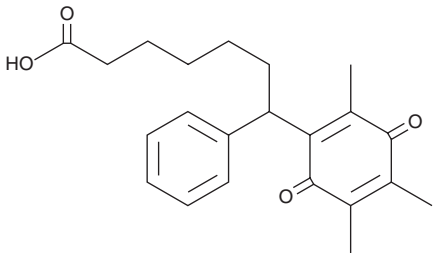
PRODUCT INFORMATION

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:	$C_{22}H_{26}O_4$
FW:	354.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 267 nm
Supplied as:	A crystalline 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

Seratrodast is supplied as a crystalline solid. A stock solution may be made by dissolving the seratrodast in the solvent of choice, which should be purged with an inert gas. Seratrodast is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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 A_2 (TXA_2) receptor (TP), blocking specific binding of U-46619 (Item No. 16450) to guinea pig platelets with an IC_{50} value of 7.4 nM and platelet aggregation induced by U-44069 (Item No. 16440) with an IC_{50} value of 350 nM.[1,2] 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.[1,4-6]

References

1. Imura, Y., Terashita, Z., Shibouta, Y., *et al. Jpn. J. Pharmacol.* **52(1)**, 35-53 (1990).
2. Shiraishi, M., Kato, K., Terao, S., *et al. J. Med. Chem.* **32(9)**, 2214-2221 (1989).
3. Kumar, G.N., Dubberke, E., Rodrigues, A.D., *et al. Drug Metab. Dispos.* **25(1)**, 110-115 (1997).
4. Miyagawa, N., Iwasaki, H., Kato, T., *et al. Biol. Pharm. Bull.* **32(12)**, 2260-2264 (2008).
5. Nawa, H., Kurosaki, Y., and Kawasaki, H. *J. Pharmacol. Sci.* **94(2)**, 115-121 (2004).
6. Jin, X., Satoh-Otonashi, Y., Zamami, Y., *et al. J. Pharmacol. Sci.* **111(4)**, 372-380 (2009).

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