Product Data Sheet

Product Name: (±)trans-2,5-bis-(3,4,5-Trimethoxyphenyl)-1,3-dioxolane
Cat. No.: GC15528

Chemical Properties

Cas. No.	116673-45-1		
Chemical Name	*trans*-(±)-2,4-*bis*(3,4,5-trimethoxyphenyl)-1,3-dioxolane		
SMILES	COC1=CC([C@H]2O[C@H](C3=CC(OC)=C(OC)C(OC)=C3)OC2)=CC(OC)=C1OC		
Formula	$C_{21}H_{26}O_8$	M.Wt	406.4
Solubility	≤35mg/ml in ethanol;50mg/ml in DMSO;50mg/ml in dimethyl formamide	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

(±)trans-2,5-bis-(3,4,5-Trimethoxyphenyl)-1,3-dioxolane, also known as trans-BTP Dioxolane, is a PAF receptor antagonist [1].

Platelet activating factor (PAF), a phospholipid mediator of inflammation, is secreted by several cell types including arterial endothelial cells, and can activate polymorphonuclear leucocytes and monocytes via specific cell surface receptors. PAF also stimulates the production of active oxygen species by human monocyte - derived macrophages. PAF play important roles in a variety of pathophysiological states including acute allergy, inflammation, asthma, gastrointestinal ulceration, and toxic shock [1].

(±)trans-2,5-bis-(3,4,5-Trimethoxyphenyl)-1,3-dioxolane is a PAF receptor antagonist. In the rabbit washed platelet assay, (±)trans-2,5-bis-(3,4,5-Trimethoxyphenyl)-1,3-

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

dioxolane showed good competitive PAF antagonism with Ki value of 0.3 μM, whereas the cis-isomer was much less active.

Reference:

[1]. Corey, E.J.,Chen, C.P., and Parry, M.J. Dual binding modes to the receptor for platelet activating factor (PAF) of anti-PAF trans-2,5-diarylfurans. Tetrahedron Letters 29, 2899-2902 (1988).