

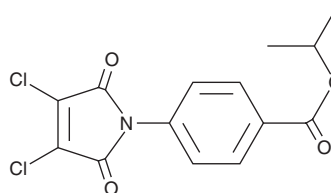
# PRODUCT INFORMATION



## TSI-01

Item No. 17628

**CAS Registry No.:** 704878-75-1  
**Formal Name:** 4-(3,4-dichloro-2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-benzoic acid, 1-methylethyl ester  
**MF:** C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>NO<sub>4</sub>  
**FW:** 328.2  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 245 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

TSI-01 is supplied as a crystalline solid. A stock solution may be made by dissolving the TSI-01 in the solvent of choice, which should be purged with an inert gas. TSI-01 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of TSI-01 in these solvents is approximately 1, 30, and 50 mg/ml, respectively.

TSI-01 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TSI-01 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TSI-01 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Platelet-activating factor (PAF) is a pro-inflammatory phospholipid mediator that is rapidly synthesized by lyso-PAF acetyltransferase (lyso-PAFAT) in response to extracellular stimuli. Two types of lyso-PAFAT have been identified: lysophosphatidylcholine acyltransferase (LPCAT)1, which is mostly expressed in the lungs, and LPCAT2, which is expressed in inflammatory cells. TSI-01 is a selective inhibitor of LPCAT2 (IC<sub>50</sub>s = 0.47 versus 3.02 μM for human LPCAT2 and LPCAT1, respectively).<sup>1</sup> At 60 μM it was shown to suppress PAF biosynthesis in mouse peritoneal macrophages stimulated with a calcium ionophore.<sup>1</sup>

### Reference

1. Tarui, M., Shindou, H., Kumagai, K., et al. Selective inhibitors of a PAF biosynthetic enzyme lysophosphatidylcholine acyltransferase 2. *J. Lipid Res.* **55(7)**, 1386-1396 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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