

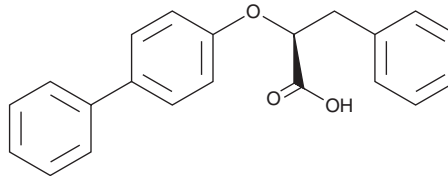
PRODUCT INFORMATION



LT175

Item No. 17636

CAS Registry No.: 862901-87-9
Formal Name: αS-([1,1'-biphenyl]-4-yloxy)-
benzenepropanoic acid
MF: C₂₁H₁₈O₃
FW: 318.4
Purity: ≥98%
UV/Vis.: λ_{max}: 260 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

LT175 is supplied as a crystalline solid. A stock solution may be made by dissolving the LT175 in the solvent of choice, which should be purged with an inert gas. LT175 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LT175 in these solvents is approximately 25, 50, and 30 mg/ml, respectively.

LT175 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LT175 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. LT175 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

Peroxisome proliferator-activated receptors (PPARs) are activated by fatty acids and eicosanoids as well as antidyslipidemic agents. Among the receptor isotypes, PPARα demonstrates a particular role in fatty acid oxidation whereas PPARγ is known to be involved in adipocyte differentiation and lipid storage. LT175 is a dual PPARα/γ ligand that displays partial agonism toward PPARγ (EC₅₀s = 0.22, 0.26, and 0.48 μM for hPPARα, mPPARα, and hPPARγ, respectively).¹ It exhibits low adipogenic activity *in vitro* and improves glucose homeostasis in diet-induced insulin resistant mice.¹ LT175 was shown to disrupt the recruitment of coregulators, cyclic-AMP response element-binding protein-binding protein and nuclear corepressor 1, to PPARγ.¹

Reference

1. Gilardi, F., Giudici, M., Mitro, N., *et al.* LT175 is a novel PPARα/γ ligand with potent insulin-sensitizing effects and reduced adipogenic properties. *J. Biol. Chem.* **289**(10), 6908-6920 (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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