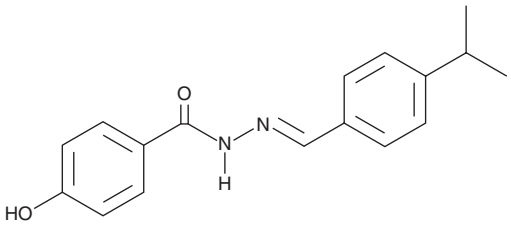
PRODUCT INFORMATION

GSK4716

Item No. 17233

CAS Registry No.:	101574-65-6
Formal Name:	4-hydroxy-2-[[4-(1-methylethyl)phenyl] methylene]hydrazide benzoic acid
MF:	$C_{17}H_{18}N_2O_2$
FW:	282.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 220, 309 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

GSK4716 is supplied as a crystalline solid. A stock solution may be made by dissolving the GSK4716 in the solvent of choice, which should be purged with an inert gas. GSK4716 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GSK4716 in ethanol and DMF is approximately 20 mg/ml and approximately 16 mg/ml in DMSO.

GSK4716 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GSK4716 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. GSK4716 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GSK4716 is an ERRβ/γ agonist (IC_{50} = 2 µM) that can activate the receptor with similar potency as the protein ligand, PGC-1α.[1] It is more than 50-fold selective for binding to ERRβ/γ compared with the estrogen receptors.[1] This compound has been used to demonstrate the contribution of ERR receptor activity to the regulation of mitochondrial activity in skeletal muscle during exercise.[2]

References

1. Wang, L., Zuercher, W.J., Consler, T.G., *et al.* X-ray crystal structures of the estrogen-related receptor-gamma ligand binding domain in three functional states reveal the molecular basis of small molecule regulation. *J. Biol. Chem.* **281(49)**, 37773-37781 (2006).
2. Rangwala, S.M., Wang, X., Calvo, J.A., *et al.* Estrogen-related receptor γ is a key regulator of muscle mitochondrial activity and oxidative capacity. *J. Biol. Chem.* **285(29)**, 22619-22629 (2010).

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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