

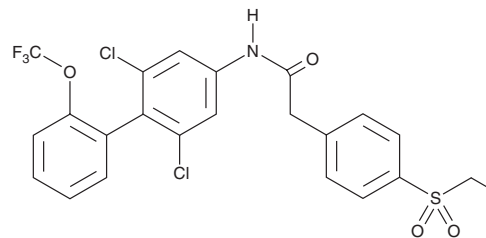
# PRODUCT INFORMATION



## GSK805

Item No. 9002444

**CAS Registry No.:** 1426802-50-7  
**Formal Name:** N-[2,6-dichloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]-4-(ethylsulfonyl)-benzeneacetamide  
**MF:** C<sub>23</sub>H<sub>18</sub>Cl<sub>2</sub>F<sub>3</sub>NO<sub>4</sub>S  
**FW:** 532.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 221, 256 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

GSK805 is supplied as a crystalline solid. A stock solution may be made by dissolving the GSK805 in the solvent of choice, which should be purged with an inert gas. GSK805 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of GSK805 in these solvents is approximately 5 and 3 mg/ml, respectively.

GSK805 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GSK805 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GSK805 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

GSK805 is a potent, orally bioavailable retinoid-related orphan receptor gamma t (RORγt) inverse agonist that interacts with the receptor's putative ligand binding domain without exerting significant effects on DNA binding.<sup>1</sup> It inhibits the expression of IL-17 (at 0.5 μM) in naïve CD4<sup>+</sup> T cells activated under Th17-cell-polarizing conditions and affects the broader RORγt-dependent gene network, inhibiting the development and pathogenic function of Th17 cells. GSK805 significantly reduces the severity of experimental autoimmune encephalomyelitis (EAE), a mouse model of multiple sclerosis, when given orally to the hosts at 10 mg/kg daily beginning at the time of disease induction.

### Reference

1. Xiao, S., Yosef, N., Yang, J., *et al.* Small-molecule RORγt antagonists inhibit T helper 17 cell transcriptional network by divergent mechanisms. *Immunity* **40(4)**, 477-489 (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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