

# PRODUCT INFORMATION



**CAY10535**

Item No. 10010396

**CAS Registry No.:** 945716-28-9  
**Formal Name:** N-[[[(1,1-dimethylethyl)amino] carbonyl]-2-(3-methoxyphenoxy)-5-nitro-benzenesulfonamide

**MF:** C<sub>18</sub>H<sub>21</sub>N<sub>3</sub>O<sub>7</sub>S

**FW:** 423.4

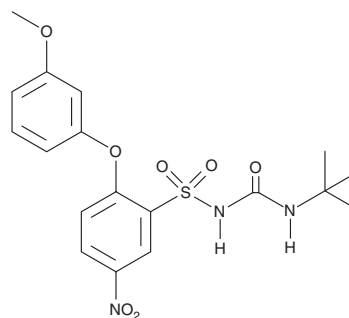
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 294 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

CAY10535 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10535 in the solvent of choice, which should be purged with an inert gas. CAY10535 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10535 in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

CAY10535 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10535 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10535 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

TP $\alpha$  and TP $\beta$  are two isoforms of the human TP receptor, the G protein-coupled receptor (GPCR) that mediates the actions of thromboxane A<sub>2</sub> (TXA<sub>2</sub>). Although their distinct physiological functions have not been fully elucidated, TP $\beta$  is believed to be responsible for vascular endothelial growth factor-induced endothelial cell differentiation and migration whereas TP $\alpha$  appears to be the predominant isoform expressed in platelets. CAY10535 is a TP receptor antagonist that shows ~20-fold selectivity for TP $\beta$  (IC<sub>50</sub> = 99 nM) relative to TP $\alpha$  (IC<sub>50</sub> = 1,970 nM) in the inhibition of U46619-mediated Ca<sup>2+</sup> mobilization. This compound exhibits relatively poor activity on platelets (IC<sub>50</sub> = 985 nM) when inhibiting U-46619-induced platelet aggregation.<sup>1</sup>

## Reference

1. Hanson, J., Dogné, J.M., Ghiotto, J., *et al.* Design, synthesis, and SAR study of a series of N-alkyl-N'-[2-(aryloxy)-5-nitrobenzenesulfonyl]ureas and -cyanoguanidine as selective antagonists of the TP $\alpha$  and TP $\beta$  isoforms of the human thromboxane A<sub>2</sub> receptor. *J. Med. Chem.* **50**(16), 3928-3936 (2007).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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