

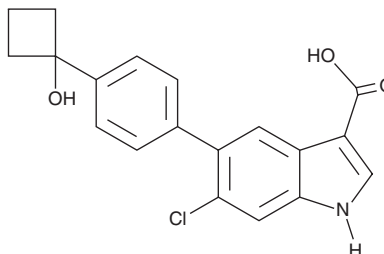
# PRODUCT INFORMATION



**PF-06409577**

Item No. 27366

**CAS Registry No.:** 1467057-23-3  
**Formal Name:** 6-chloro-5-[4-(1-hydroxycyclobutyl)phenyl]-1H-indole-3-carboxylic acid  
**MF:** C<sub>19</sub>H<sub>16</sub>ClNO<sub>3</sub>  
**FW:** 341.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 245, 289 nm  
**Supplied as:** A 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

PF-06409577 is supplied as a solid. A stock solution may be made by dissolving the PF-06409577 in the solvent of choice, which should be purged with an inert gas. PF-06409577 is soluble in DMSO.

## Description

PF-06409577 is an activator of AMP-activated protein kinase (AMPK) heterotrimers ( $K_d = 9$  nM for  $\alpha 1\beta 1\gamma 1$ ).<sup>1</sup> *In vitro*, it selectively activates  $\beta 1$ -containing AMPK isoforms ( $EC_{50}s = 2.18$ - $7.03$  nM) over  $\beta 2$ -containing isoforms ( $EC_{50}s = \geq 10$   $\mu$ M). PF-06409577 has an  $EC_{50}$  value of 7 nM in an activation/protection TR-FRET assay using  $\alpha 1\beta 1\gamma 1$  AMPK. *In vivo*, PF-06409577 ( $\geq 10$  mg/kg) increases phosphorylation of AMPK in rat kidney. It decreases urinary albumin levels in a ZSF1 obese rat model of diabetes, metabolic syndrome, and renal disease when administered at a dose of 100 mg/kg.

## Reference

1. Cameron, K.O., Kung, D.W., Kalgutkar, A.S., *et al.* Discovery and preclinical characterization of 6-chloro-5-[4-(1-hydroxycyclobutyl)phenyl]-1H-indole-3-carboxylic acid (PF-06409577), a direct activator of adenosine monophosphate-activated protein kinase (AMPK), for the potential treatment of diabetic nephropathy. *J. Med. Chem.* **59**(17), 8068-8081 (2016).

### 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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