

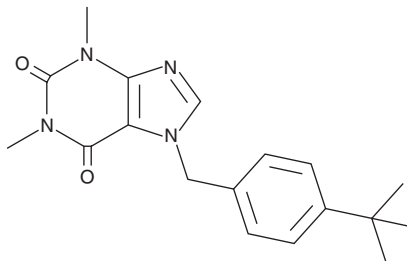
# PRODUCT INFORMATION



**VU0071063**

Item No. 21897

**CAS Registry No.:** 333415-38-6  
**Formal Name:** 7-[[4-(1,1-dimethylethyl)phenyl]methyl]-3,7-dihydro-1,3-dimethyl-1H-purine-2,6-dione  
**MF:** C<sub>18</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 326.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 273 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

VU0071063 is supplied as a crystalline solid. A stock solution may be made by dissolving the VU0071063 in the solvent of choice. VU0071063 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of VU0071063 in these solvents is approximately 20 and 30 mg/ml, respectively.

VU0071063 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, VU0071063 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. VU0071063 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

VU0071063 is a potent and selective activator of the inward-rectifier potassium channel (K<sub>ir</sub>) 6.2 and sulfonylurea receptor (SUR) 1 (EC<sub>50</sub> = 7 μM using whole cell patch clamp electrophysiology).<sup>1</sup> It is selective for SUR1-containing K<sub>ir</sub>6.1 or K<sub>ir</sub>6.2 channels over SUR2A, K<sub>ir</sub>2.1, K<sub>ir</sub>2.2, K<sub>ir</sub>2.3, K<sub>ir</sub>3.1/3/2, and voltage-gated potassium channel 2.1. VU0071063 inhibits glucose-stimulated calcium entry in isolated mouse pancreatic β-cells.

## Reference

1. Raphemot, R., Swale, D.R., Dadi, P.K., *et al.* Direct activation of β-cell KATP channels with a novel xanthine derivative. *Mol. Pharmacol.* **85**(6), 858-865 (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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