# **PRODUCT** INFORMATION



**GAL-021** 

Item No. 22609

CAS Registry No.:	1380341-99-0	<b>N O</b>
Formal Name:	N <sup>2</sup> -methoxy-N <sup>2</sup> -methyl-N <sup>4</sup> ,N <sup>6</sup> -dipropyl-	N V
	1,3,5-triazine-2,4,6-triamine	
MF:	C <sub>11</sub> H <sub>22</sub> N <sub>6</sub> O	
FW:	254.3	N ~ N 
Purity:	≥95%	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥2 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

GAL-021 is supplied as a crystalline solid. A stock solution may be made by dissolving the GAL-021 in the solvent of choice. GAL-021 is soluble in the organic solvent DMSO, which should be purged with an inert gas.

# Description

GAL-021 is a large-conductance Ca<sup>2+</sup>-activated potassium channel (BK<sub>Ca</sub>/K<sub>Ca</sub>1.1) blocker.<sup>1</sup> It inhibits BK<sub>Ca</sub> single-channel activity in GH3 cells in a concentration-dependent manner when used at concentrations ranging from 1 to 10 µM. GAL-021 increases respiratory product minute volume in wild-type rats and mice (ED<sub>50</sub>s = 0.1 and 0.5 mg/kg) but not mice with bilaterally transected carotid sinus nerves or Slo<sup>-/-</sup> mice that lack the pore-forming  $\alpha$ -subunit of BK<sub>Ca</sub>. It reverses morphine-induced respiratory depression in rats and cynomolgus monkeys. GAL-021 also potentiates morphine-induced analgesia in a tail-flick assay in rats.

# Reference

1. Golder, F.J., Dax, S.L., Baby, S.M., et al. Identification and characterization of GAL-021 as a novel breathing control modulator. Anesthesiology 123(5), 1093-1104 (2015).

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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