
Product Data Sheet

Product Name: GAL-021 sulfate

Cat. No.: GC64418

Chemical Properties

Cas. No. 1380342-00-6

Formula C₁₁H₂₄N₆O₅S M.Wt 352.41

Solubility Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

GAL-021 is a large-conductance Ca²⁺-activated potassium channel (BK_{Ca}/K_{Ca}1.1) blocker.¹ It inhibits BK_{Ca} 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 (ED₅₀s = 0.1 and 0.5 mg/kg) but not mice with bilaterally transected carotid sinus nerves or *Slo*^{-/-} mice that lack the pore-forming α-subunit of BK_{Ca}. 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.

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)

Caution: Product has not been fully validated for medical applications. For research use only.

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