

## Catalog # 10-3228 Cromakalim

CAS# 94470-67-4

(±)-trans-6-Cyano-3,4-dihydro-2,2-dimethyl-4-(2-oxopyrrolidin-1-yl)-2H-1-benzopyran-3-ol BRL-34915
Lot # \$105088

A potent and selective ATP-sensitive potassium channel (K<sub>ATP</sub> or Kir6) opener.<sup>1</sup> Dose dependently prevents or suppresses hyperalgesia and allodynia in a sciatic nerve injury model.<sup>2</sup> Displays ocular hypotensive and neuroprotective properties.<sup>3</sup> Attenuates morphine chronic antinociceptive tolerance.<sup>4</sup>

- 1) Sanguinetti et al. (1988), BRL 34915 (cromakalim) activates ATP-sensitive K+ current in cardiac muscle; Proc. Natl. Acad. Sci. USA, **85** 8360
- 2) Wu et al. (2011), Reopening of ATP-sensitive potassium channels reduces neuropathic pain and regulates astroglial gap junctions in the rat spinal cord; Pain, **152** 2605
- 3) Roy Chowdhury et al. (2017), ATP sensitive potassium channel openers: A new class of ocular hypotensive agents; Exp. Eye Res., **158** 85
- 4) Cao et al. (2016), Opening of the Adenosine Triphosphate-sensitive Potassium Channel Attenuates Morphine Tolerance by Inhibiting JNK and Astrocyte Activation in the Spinal Cord; Clin. J. Pain, **32** 617

## **PHYSICAL DATA**

Molecular Weight: 286.33

Molecular Formula: C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 40 mg/ml) or Ethanol (up to 10 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 2 years from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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