PRODUCT INFORMATION



(±)-Cromakalim

Item No. 14601

CAS Registry No.: 94470-67-4

Formal Name: (3R,4S)-rel-3,4-dihydro-3-hydroxy-2,2-

dimethyl-4-(2-oxo-1-pyrrolidinyl)-2H-1-

benzopyran-6-carbonitrile

Synonym: BRL 34915 MF: $C_{16}H_{18}N_2O_3$ FW: 286.3 **Purity:** ≥98% 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

(±)-Cromakalim is supplied as a solid. A stock solution may be made by dissolving the (±)-cromakalim in the solvent of choice. (±)-Cromakalim is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 50 mM.

Description

(±)-Cromakalim is a prototypical activator of the ATP-sensitive potassium channel, SUR2-K_{ir}6, that displays anti-ischemic (EC $_{25}$ = 8.9 μ M) and cardioprotective (IC $_{50}$ = 0.03 μ M) effects in rat hearts. 1 (±)-Cromakalim has also been shown to relax bladder smooth muscle *in vitro*. 1 It has been used to investigate potassium channel biology and as a scaffold to develop increasingly selective K⁺ channel openers with clinical relevance.¹

Reference

1. Coghlan, M.J., Carroll, W.A., and Gopalakrishnan, M. Recent developments in the biology and medicinal chemistry of potassium channel modulators: Update from a decade of progress. J. Med. Chem. 44(11), 1627-1653 (2001).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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