

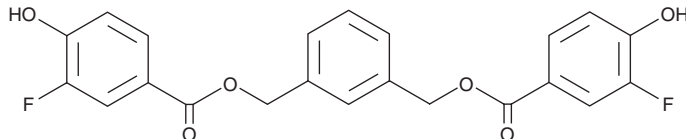
PRODUCT INFORMATION



RA-2

Item No. 39567

CAS Registry No.: 1867107-62-7
Formal Name: 3-fluoro-4-hydroxy-1,1'-[1,3-phenylenebis(methylene)] ester, benzoic acid
MF: $C_{22}H_{16}F_2O_6$
FW: 414.4
Purity: $\geq 95\%$
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

RA-2 is supplied as a solid. A stock solution may be made by dissolving the RA-2 in the solvent of choice, which should be purged with an inert gas. RA-2 is soluble in organic solvents such as ethanol and DMSO. The solubility of RA-2 in these solvents is approximately 15 and 5 mg/ml, respectively.

Description

RA-2 is an inhibitor of small-conductance calcium-activated potassium channel 2.3 ($K_{Ca2.3/SK3}$) and intermediate-conductance calcium-activated potassium channel 3.1 ($K_{Ca3.1/IK1}$) ($IC_{50}s = 2$ and 17 nM, respectively).¹ It is selective for these channels over $K_{Ca1.1/BK1}$, voltage-gated potassium channel 1.2 ($K_v1.2$), $K_v1.3$, $K_v7.4$, human-ether-a-go-go (hERG), also known as $K_v11.1$, and the inward-rectifier potassium channel (K_{ir}), but also inhibits $K_{Ca2.1}$ and $K_{Ca2.2}$ by 96 and 90%, respectively, at 1 μM . RA-2 (1 μM) inhibits bradykinin-induced relaxation of porcine coronary artery rings precontracted with the TP receptor agonist U-46619 (Item No. 16450). It decreases heart rate, but not mean arterial blood pressure, in mice when administered at a dose of 30 mg/kg.

Reference

1. Oliván-Viguera, A., Valero, M.S., Coleman, N., *et al.* A novel pan-negative-gating modulator of $K_{Ca2/3}$ channels, fluoro-di-benzoate, RA-2, inhibits endothelium-derived hyperpolarization-type relaxation in coronary artery and produces bradycardia in vivo. *Mol. Pharmacol.* **87**(2), 338-348 (2018).

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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