SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

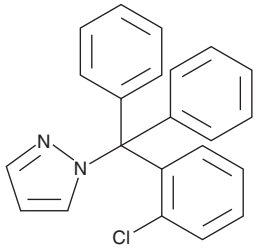
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

TRAM-34

Item No. 23385

CAS Registry No.:	289905-88-0
Formal Name:	1-[(2-chlorophenyl)diphenylmethyl]-1H-pyrazole
MF:	$C_{22}H_{17}ClN_2$
FW:	344.8
Purity:	≥98%
Supplied as:	A crystalline 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

TRAM-34 is supplied as a crystalline solid. A stock solution may be made by dissolving the TRAM-34 in the solvent of choice, which should be purged with an inert gas. TRAM-34 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of TRAM-34 is approximately 0.2 mg/ml in ethanol and approximately 0.5 mg/ml in DMSO and DMF.

Description

TRAM-34 is a membrane-permeable inhibitor of the intermediate-conductance calcium-activated potassium channel (IKCa1/K_{Ca}3.1).[1] It blocks IKCa1 (K_ds = 20 and 25 nM for the cloned and native channel in COS-7 cells and human T lymphocytes, respectively) with 200- to 1,500-fold selectivity for IKCa1 over K_v (K_v1.1-K_v1.5, K_v3.1, K_v4.2), K_{ir}2.1, BK/K_{Ca}1.1, SK_{Ca} (rSK_{Ca}2, hSK_{Ca}2, hSK_{Ca}3), native SK_{Ca}/K_{Ca}2, and CRAC in Jurkat T cells, as well as sodium and chloride channels. It also inhibits nonselective lysophosphatidylcholine-induced cation currents (IC_{50} = 38 nM).[2] TRAM-34 suppresses reactivation of human-derived T lymphocytes stimulated with anti-CD3 antibody after an initial pretreatment to upregulate IKCa1 channels (mean EC_{50}s = 295 and 910 nM from sensitive and less sensitive human donors, respectively).[1] It does not reduce viability of human T lymphocytes at a concentration of 5 µM over 48 hours incubation. *In vitro*, TRAM-34 (10-40 µM) inhibits proliferation of human endometrial cancer cells and induces cell cycle arrest at the G_0/G_1 phase.[3] It also inhibits proliferation of LNCaP and PC3 prostate cancer cells and proliferation induced by epidermal growth factor (EGF) in smooth muscle A7r5 cells (IC_{50} = 8 nM).[4,5] *In vivo*, TRAM-34 (120 mg/kg per day) reduces intimal hyperplasia by approximately 40% after 1, 2, and 6 weeks in a rat model of balloon catheter injury. TRAM-34 (30 µM) treatment of HEC-1-A cells prior to flank implantation into nude mice slows tumor growth *in vivo*.

References

1. Wulff, H., Miller, M.J., Hänsel, W., *et al. Proc. Natl. Acad. Sci. U.S.A.* **97(14)**, 8151-8156 (2000).
2. Schilling, T. and Eder, C. *Pflugers Arch.* **454(4)**, 559-563 (2007).
3. Wang, Z.H., Shen, B., Yao, H.L., *et al. Oncogene* **26(35)**, 5107-5114 (2007).
4. Lallet-Daher, H., Roudbaraki, M., Bavencoffe, A., *et al. Oncogene* **28(15)**, 1792-1806 (2009).
5. Köhler, R., Wulff, H., Eichler, I., *et al. Circulation* **108(9)**, 1119-1125 (2003).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM