

Certificate of Analysis

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Print Date: Jan 14th 2016

Product Name: TRAM 34 Catalog No.: 2946 Batch No.: 2

CAS Number: 289905-88-0

IUPAC Name: 1-[(2-Chlorophenyl)diphenylmethyl]-1*H*-pyrazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{17}CIN_2$ Batch Molecular Weight:344.84Physical Appearance:White solid

Solubility: DMSO to 10 mM with gentle warming

ethanol to 5 mM with sonication

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Ethyl acetate:Petroleum ether [95:5])

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 76.63 4.97 8.12 Found 76.59 4.99 8.13



Product Information

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Description:

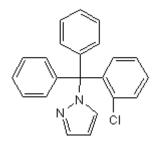
Potent and highly selective blocker of intermediate conductance Ca²⁺-activated K+ channels ($K_{Ca}3.1$) ($K_d=20$ nM). Exhibits 200-1500-fold selectivity over K_V , B K_{Ca} , $K_{Ca}2$, Na+, CRAC and Cl-channels. Suppresses the reactivation of lymphocytes by mitogenic stimuli.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₁₇CIN₂ Batch Molecular Weight: 344.84 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 10 mM with gentle warming ethanol to 5 mM with sonication

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Wulff *et al* (2000) Design of a potent and selective inhibitor of the intermediate-conductance Ca²⁺-activated K+ channel, IKCa1: a potential immunosuppressant. Proc.Natl.Acad.Sci. USA **97** 8151.

Schilling and Eder (2007) TRAM-34 inhibits nonselective cation channels. Pflugers Arch. 454 559. PMID: 17318643.

Wang et al (2007) An intermediate-conductance Ca²⁺-activated K+ channel mediates B lymphoma cell cycle progression induced by serum. Pflugers Arch. **454** 945. PMID: 17429684.