Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

DATASHEET

TRAM 34

Product overview

Name	TRAM 34
Cat No	HB1058
Biological action	Blocker
Purity	>99%
Description	Potent, selective $K_{Ca}3.1$ channel blocker

Images

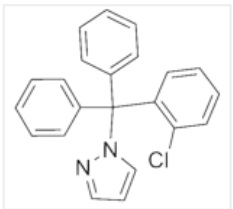
Biological Data

Biological description	Potent and selective $K_{Ca}3.1$ channel blocker (IC_{50} = 18 nM and K_d = 20 nM). Exhibits approx 200 to 1,500-fold less effect at $K_v1.1$-1.5, $K_v3.1$, $K_v4.2$, $K_{ir}2.1$ and $K_{Ca}1.1$ channels. Displays anti-tumor properties and suppresses T-cell mitogenesis. Blood brain barrier and membrane permeable.

Solubility & Handling

Storage instructions	+4°C
Solubility overview	Soluble in DMSO (50mM) or ethanol (10mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1-[(2-Chlorophenyl)diphenylmethyl]-1*H*-pyrazole
Molecular Weight	344.84
Chemical structure	
Molecular Formula	$C_{22}H_{17}ClN_2$

CAS Number	289905-88-0
PubChem identifier	656734
SMILES	ClC(C=CC=C4)=C4C(N2C=CC=N2)(C3=CC=CC=C3)C1=CC=CC=C1
InChiKey	KBFUQFVFYYBHBT-UHFFFAOYSA-N

References

The inhibitor of Ca(2+)-dependent K+ channels TRAM-34 blocks growth of hepatocellular carcinoma cells via downregulation of estrogen receptor alpha mRNA and nuclear factor-kappaB.

Freise C *et al* (2013) Invest New Drugs 31(2)
PubMedID 23054207

The KCa3.1 blocker TRAM-34 reduces infarction and neurological deficit in a rat model of ischemia/reperfusion stroke.

Chen YJ *et al* (2011) J Cereb Blood Flow Metab 31(12)
PubMedID 21750563

The intermediate-conductance calcium-activated potassium channel KCa3.1 contributes to atherogenesis in mice and humans.

Toyama K *et al* (2008) J Clin Invest 118(9)
PubMedID 18688283

Design of a potent and selective inhibitor of the intermediate-conductance Ca2+-activated K+ channel, IKCa1: a potential immunosuppressant.

Wulff H *et al* (2000) Proc Natl Acad Sci U S A 97(14)
PubMedID 10884437