

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 in



PRODUCT INFORMATION



CyPPA

Item No. 15614

CAS Registry No.: 73029-73-9

Formal Name: N-cyclohexyl-2-(3,5-dimethyl-1H-

pyrazol-1-yl)-6-methyl-4-pyrimidinamine

MF: $C_{16}H_{23}N_5$ FW: 285.4 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CyPPA is supplied as a solid. A stock solution may be made by dissolving the CyPPA in the solvent of choice. CyPPA is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of CyPPA in these solvents is approximately 100 mM.

Description

CyPPA is a positive modulator of the small-conductance calcium-activated potassium channels $K_{Ca}2.2/SK2$ and $K_{Ca}2.3/SK3$ (EC $_{50}s$ = 14 and 5.6 μ M, respectively). It is inactive on both $K_{Ca}2.1/SK1$ and the intermediate conductance calcium-activated potassium channel, $K_{Ca}3.1/SK4$. At $K_{Ca}2.3/SK3$, CyPPA increases the apparent calcium-sensitivity of channel activation, changing the EC₅₀ value of calcium activation from 429 to 59 nM. CyPPA is used to evaluate the roles of $K_{Ca}2.2$ /SK2 and $K_{Ca}^{\circ}2.3$ /SK3 in such diverse processes as memory encoding, uterine muscle contraction, and dopamine signaling.³⁻⁵

References

- 1. Hougaard, C., Eriksen, B.L., Jurgensen, S., et al. Selective positive modulation of the SK3 and SK2 subtypes of small conductance Ca²⁺-activated K⁺ channels. Br. J. Pharmacol. **151(5)**, 655-665 (2007).
- 2. Hougaard, C., Jensen, M.L., Dale, T.J., et al. Selective activation of the SK1 subtype of human smallconductance Ca²⁺-activated K⁺ channels by 4-(2-methoxyphenylcarbamoyloxymethyl)-piperidine-1carboxylic acid tert-butyl ester (GW542573X) is dependent on serine 293 in the S5 segment. Mol. Pharmacol. 76(3), 569-578 (2009).
- 3. Vick, K.A.IV., Guidi, M., and Stackman, R.W., Jr. In vivo pharmacological manipulation of small conductance Ca²⁺-activated K⁺ channels influences motor behavior, object memory and fear conditioning. Neuropharmacology 58(3), 650-659 (2010).
- 4. Skarra, D.V., Cornwell, T., Solodushko, V., et al. CyPPA, a positive modulator of small-conductance Ca²⁺activated K⁺ channels, inhibits phasic uterine contractions and delays preterm birth in mice. Am. J. Physiol. Cell Physiol. 301(5), C1027-C1035 (2011).
- 5. Herrik, K.F., Redrobe, J.P., Holst, D., et al. CyPPA, a positive SK3/SK2 modulator, reduces activity of dopaminergic neurons, inhibits dopamine release, and counteracts hyperdopaminergic behaviors induced by methylphenidate. Front. Pharmacol. 3(11), (2012).

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.

WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/12/2021

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