

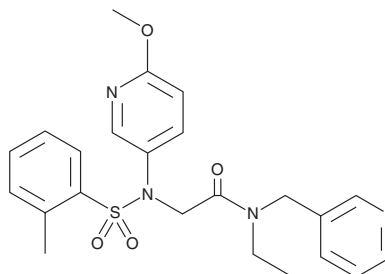
PRODUCT INFORMATION



EMPA

Item No. 29446

CAS Registry No.: 680590-49-2
Formal Name: N-ethyl-2-[(6-methoxy-3-pyridinyl) [(2-methylphenyl)sulfonyl]amino]-N-(3-pyridinylmethyl)-acetamide
MF: C₂₃H₂₆N₄O₄S
FW: 454.5
Purity: ≥98%
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

EMPA is supplied as a solid. A stock solution may be made by dissolving the EMPA in the solvent of choice, which should be purged with an inert gas. EMPA is soluble in ethanol and DMSO.

Description

EMPA is an orexin 2 receptor (OX2R) antagonist ($K_i = 1.1$ nM).¹ It is selective for OX2R over OX1R ($K_i = 900$ nM). EMPA inhibits orexin-A- and orexin-B-induced calcium mobilization (IC_{50} s = 8.8 and 7.9 nM, respectively) and increases orexin-A- and orexin-B-induced inositol phosphate accumulation (EC_{50} s = 1.1 and 2.4 nM, respectively) in CHO(dHFr) cells expressing recombinant human OX2R. It reduces spontaneous locomotor activity and orexin-B-induced hyperlocomotion in mice when administered at doses ranging between 10 and 300 mg/kg.

Reference

1. Malherbe, P., Borroni, E., Gobbi, L., *et al.* Biochemical and behavioural characterization of EMPA, a novel high-affinity, selective antagonist for the OX₂ receptor. *Br. J. Pharmacol.* **156**(8), 1326-1341 (2009).

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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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