

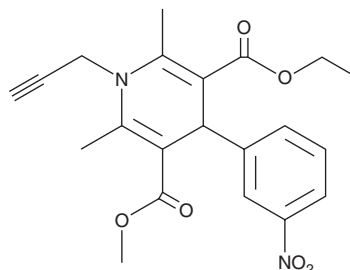
PRODUCT INFORMATION



MRS1845

Item No. 36814

CAS Registry No.: 544478-19-5
Formal Name: 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-1-(2-propyn-1-yl)-3,5-pyridinedicarboxylic acid, 3-ethyl 5-methyl ester
MF: C₂₁H₂₂N₂O₆
FW: 398.4
Purity: ≥95%
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

MRS1845 is supplied as a solid. A stock solution may be made by dissolving the MRS1845 in the solvent of choice, which should be purged with an inert gas. MRS1845 is soluble in chloroform.

Description

MRS1845 is an inhibitor of store-operated calcium (SOC) channels ($IC_{50} = 1.7 \mu M$ in HL-60 leukemia cells) and the L-type voltage-gated calcium channel Ca_v1 ($IC_{50} = 2.1 \mu M$ in GH4C1 rat pituitary cells).¹ It reduces calcium entry induced by the sarcoplasmic/endoplasmic Ca^{2+} -ATPase (SERCA) inhibitor thapsigargin (Item No. 10522) in isolated rat polymorphonuclear leukocytes (PMNs) after administration of a 1.2 mg/kg dose.² MRS1845 (1.2 mg/kg) decreases shock-induced increases in ITGAM/CD11b levels in PMNs isolated from rats in a model of traumatic hemorrhagic shock.

References

1. Harper, J.L., Camerini-Otero, C.S., Li, A.-H., *et al.* Dihydropyridines as inhibitors of capacitative calcium entry in leukemic HL-60 cells. *Biochem. Pharmacol.* **65**(3), 329-338 (2003).
2. Lee, C., Xu, D.-Z., Feketeova, E., *et al.* Calcium entry inhibition during resuscitation from shock attenuates inflammatory lung injury. *Shock* **30**(1), 29-35 (2008).

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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