

# PRODUCT INFORMATION



**MRK-740**

Item No. 26387

**CAS Registry No.:** 2387510-80-5

**Formal Name:** 4-[3-(3,5-dimethoxyphenyl)-1,2,4-oxadiazol-5-yl]-1-methyl-9-(2-methyl-4-pyridinyl)-1,4,9-triazaspiro[5.5]undecane

**MF:** C<sub>25</sub>H<sub>32</sub>N<sub>6</sub>O<sub>3</sub>

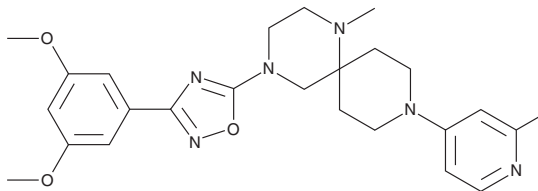
**FW:** 464.6

**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

MRK-740 is supplied as a solid. A stock solution may be made by dissolving the MRK-740 in the solvent of choice, which should be purged with an inert gas. MRK-740 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

## Description

MRK-740 is an inhibitor of the lysine methyltransferase PR/SET domain 9 (PRDM9; IC<sub>50</sub> = 80 nM).<sup>1</sup> It inhibits PRDM9-dependent trimethylation of ectopic histone H3K4 (IC<sub>50</sub> = 0.8 μM) and endogenous H3K4 in HEK293 cells in a concentration-dependent manner. MRK-740 induces meiotic defects in mouse spermatocytes.

## Reference

1. Allali-Hassani, A., Szewczyk, M.M., Ivanochko, D., et al. Discovery of a chemical probe for PRDM9. *Nat. Commun.* 10(1), 5759 (2019).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

Buyer 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, 08/19/2024

## 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](http://WWW.CAYMANCHEM.COM)