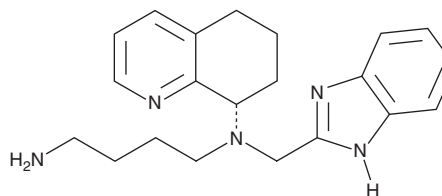


# PRODUCT INFORMATION



## Mavorixafor Item No. 28439

**CAS Registry No.:** 558447-26-0  
**Formal Name:** N<sup>1</sup>-(1H-benzimidazol-2-ylmethyl)-N<sup>1</sup>-[(8S)-5,6,7,8-tetrahydro-8-quinoliny]-1,4-butanediamine  
**Synonyms:** AMD 070, AMD 11070, X4P-001  
**MF:** C<sub>21</sub>H<sub>27</sub>N<sub>5</sub>  
**FW:** 349.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 270, 277 nm  
**Supplied as:** A crystalline 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

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

### Description

Mavorixafor is a chemokine (C-X-C motif) receptor 4 (CXCR4) antagonist (IC<sub>50</sub> = 13 nM in a radioligand binding assay).<sup>1</sup> It is selective for CXCR4 over chemokine (C-C motif) receptor 1 (CCR1), CCR2b, CCR4, CCR5, CXCR1, and CXCR2 (IC<sub>50</sub>s = >10 μM for all). Mavorixafor reduces chemotaxis of CCRF-CEM T cells induced by chemokine (C-X-C motif) ligand 12 (CXCL12; IC<sub>50</sub> = 19 nM).<sup>2</sup> It inhibits fusion of CHO-K1 cells expressing gp120 to P4-P5 MAGI cells with an IC<sub>50</sub> value of 1.5 nM. It decreases HIV-1 NL4.3 viral replication in MT-4 cells and isolated human peripheral blood mononuclear cells (PBMCs; IC<sub>50</sub>s = 2 and 9 nM, respectively).<sup>1</sup>

### References

1. Skerlj, R.T., Bridger, G.J., Kaller, A., *et al.* Discovery of novel small molecule orally bioavailable C-X-C chemokine receptor 4 antagonists that are potent inhibitors of T-tropic (X4) HIV-1 replication. *J. Med. Chem.* **53**(8), 3376-3388 (2010).
2. Mosi, R.M., Anastassova, V., Cox, J., *et al.* The molecular pharmacology of AMD11070: An orally bioavailable CXCR4 HIV entry inhibitor. *Biochem. Pharmacol.* **83**(4), 472-479 (2012).

#### 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

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