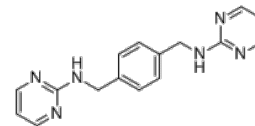


**Product Name** : MSX-122  
**Cat. No.** : PC-38724  
**CAS No.** : 897657-95-3  
**Molecular Formula** : C<sub>16</sub>H<sub>16</sub>N<sub>6</sub>  
**Molecular Weight** : 292.346  
**Target** : Chemokine Receptor (CCR and CXCR)  
**Solubility** : 10 mM in DMSO



## Biological Activity

MSX-122 is a small molecule and partial CXCR4 antagonist, directly binds to the CXCL12 site on CXCR4 and inhibits CXCR4/CXCL12 actions with IC<sub>50</sub> of 10 nM.

MSX-122 (100 nM) effectively blocked invasion of 78% MDA-MB-231 cells while the same concentration of AMD3100 blocked invasion of 62% cells.

MSX-122 exhibits a different profile than AMD3100 and other reported anti-CXCR4 compounds: (1) MSX-122 did not inhibit T-tropic HIV infection (via the formation of the CXCR4/CD4/GP120 complex), while AMD3100; (2) unlike AMD3100, MSX-122 proved to be inactive in our calcium flux assay.

MSX-122 attenuates colonic damage in mice with experimental colitis, inhibits inflammation induced by carrageenan and lung fibrosis induced by bleomycin.

MSX-122 blocks metastasis in an experimental animal model of breast cancer metastasis, also inhibit metastatic progression in an orthotopic mouse model of uveal melanoma micrometastasis.

## References

Liang Z, et al. PLoS One. 2012;7(4):e34038.

Shu HK, et al. PLoS One. 2013 Nov 7;8(11):e79768.

Wu X, et al. Cancer Sci. 2022 Mar;113(3):926-939.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com