

Catalog # 10-4925 SX-682

CAS# 1648843-04-2

[2-[[5-[(4-Fluorophenyl)carbamoyl]pyrimidin-2-yl]sulfanylmethyl]-4-(trifluoromethoxy)phenyl]boronic acid



SX-682 is a novel CXCR1/2 inhibitor (IC₅₀s: CXCR1 = 42 nM, CXCR2 = 20 nM)¹. It displayed robust synergistic activity with immune checkpoint blockade against castration resistant prostate cancer.² It significantly reduced tumor burden in a Pten^{fl/fl}/Lkb1^{fl/fl} mouse model of lung squamous cell cancer when used in combination with anti-PD1 therapy.³ SX-682 significantly inhibited trafficking of neutrophilic myeloid-derived suppressor cells (PMN-MDSCs) enhancing anti-PD1 immune checkpoint blockade, T cell-based immunotherapy, and NK-cell immunotherapy.^{4,5}

- 1) Zebala et al. (2015), WO2015/016938
- 2) Lu et al. (2017), Effective combinatorial immunotherapy for castration-resistant prostate cancer, Nature 542 728
- 3) Kargl et al. (2019), Neutrophil content predicts lymphocyte depletion and anti-PD1 treatment failure in NSCLC; JCI Insight 4 e130850
- 4) Sun et al. (2019), Inhibiting myeloid-derived suppressor cell trafficking enhances T cell immunotherapy; JCI Insight 4 e126853
- 5) Greene et al. (2020), Inhibition of MDSC Trafficking with SX-682, a CXCR1/2 Inhibitor, Enhances NK-Cell Immunotherapy in Head and Neck Cancer Models; Clin. Cancer Res. **26** 1420

PHYSICAL DATA

| Molecular Weight: | 467.20 |
|------------------------|---|
| Molecular Formula: | C ₁₉ H ₁₄ BF ₄ N ₃ O ₄ S |
| Purity: | >98% by HPLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (>25 mg/ml) |
| Physical Description: | Off-white solid |
| Storage and Stability: | Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months. |

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