

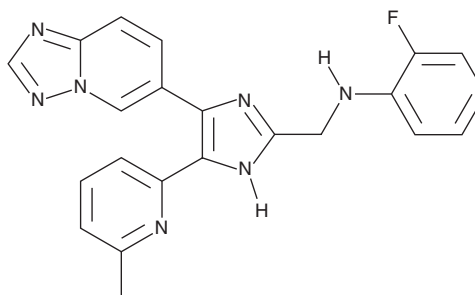
# PRODUCT INFORMATION



**EW-7197**

Item No. 19231

**CAS Registry No.:** 1352608-82-2  
**Formal Name:** N-(2-fluorophenyl)-5-(6-methyl-2-pyridinyl)-4-[1,2,4]triazolo[1,5-a]pyridin-6-yl-1H-imidazole-2-methanamine  
**Synonym:** Vactosertib  
**MF:** C<sub>22</sub>H<sub>18</sub>FN<sub>7</sub>  
**FW:** 399.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 229, 306 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

EW-7197 is supplied as a crystalline solid. A stock solution may be made by dissolving the EW-7197 in the solvent of choice, which should be purged with an inert gas. EW-7197 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of EW-7197 in these solvents is approximately 30 mg/ml.

EW-7197 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EW-7197 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. EW-7197 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

EW-7197 is a potent inhibitor of activin receptor-like kinase 5 (ALK5, also known as TGF-β receptor type 1; IC<sub>50</sub> = 12.9 nM).<sup>1,2</sup> It also inhibits ALK2 and ALK4 at nanomolar concentrations.<sup>2</sup> EW-7197 blocks TGF-β/Smad signaling, cell migration, invasion, and lung metastasis in mouse mammary tumor virus/c-Neu mice and 4T1 orthotopic-grafted mice.<sup>2</sup> It also inhibits epithelial-to-mesenchymal transition (EMT) in TGF-β-treated breast cancer cells.<sup>2</sup> EW-7197 is used to block TGF-β signaling and EMT in animal models of cancer and fibrosis.<sup>3-5</sup>

## References

1. Jin, C.H., Krishnaiah, M., Sreenu, D., et al. *J. Med. Chem.* **57(10)**, 4213-4238 (2014).
2. Son, J.Y., Park, S.-Y., Kim, S.-J., et al. *Mol. Cancer Ther.* **13(7)**, 1704-1716 (2014).
3. Kaowinn, S., Kim, J., Lee, J., et al. *Oncotarget* **8(3)**, 5092-5110 (2017).
4. Kim, M.-J., Park, S.-A., Kim, C.H., et al. *Cell Physiol. Biochem.* **38(2)**, 571-588 (2016).
5. Yoon, J.-H., Jung, S.M., Park, S.H., et al. *EMBO Mol. Med.* **5(11)**, 1720-1739 (2013).

### 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, 12/05/2022

## 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