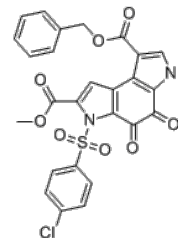


**Product Name** : F5446  
**Cat. No.** : PC-72045  
**CAS No.** : 2304465-89-0  
**Molecular Formula** : C<sub>26</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>8</sub>S  
**Molecular Weight** : 552.938  
**Target** : Histone Methyltransferase (HMTase)  
**Solubility** : 10 mM in DMSO



## Biological Activity

F5446 (F 5446) is a specific small molecule inhibitor of H3K9me3-specific histone methyltransferase **SUV39H1** with EC50 of 0.496 uM in an in vitro enzymatic activity assay.

F5446 treatment reduced H3K9me3 in the promoter regions of Gzmb, Prf1, Faslg, and Ifng in activated T cells, significantly increased the percentage of granzyme B-, IFN $\gamma$ -, and FasL-positive T cells, increased the protein levels (MFI) of granzyme B, IFN $\gamma$ , and FasL.

F5446 increased T-cell effector gene expression to suppress colon carcinoma growth in vivo.

## References

Lu C, et al. *Cancer Immunol Res.* 2019 Mar;7(3):414-427.

Lu C, et al. *Cancer Lett.* 2020 Apr 28;476:87-96.

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

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