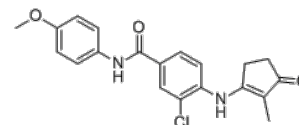


**Product Name** : MS402  
**Cat. No.** : PC-70284  
**CAS No.** : 1672684-68-2  
**Molecular Formula** : C<sub>20</sub>H<sub>19</sub>ClN<sub>2</sub>O<sub>3</sub>  
**Molecular Weight** : 370.833  
**Target** : Bromodomain  
**Solubility** : 10 mM in DMSO



## Biological Activity

MS402 (MS 402) is a potent, selective inhibitor of the first bromodomain of BET (**BRD4-BD1**) with  $K_i$  of 77 nM.

MS402 shows about 10-fold weaker affinity for BRD4-BD2 ( $K_i=718$  nM) and CBP, and >50-fold for PCAF, SMARCA4, BPTF and BAZ2B.

MS402 selectively blocks Th17 cell differentiation with a little or almost no effect on Th1 or Th2 and Treg cells.

MS402 preferentially renders Brd4 binding to Th17 signature gene loci over those of housekeeping genes and reduces Brd4 recruitment of p-TEFb to phosphorylate and activate RNA polymerase II for transcription elongation.

MS402 prevents and ameliorates T-cell transfer-induced colitis in mice.

## References

Cheung K, et al. *Proc Natl Acad Sci U S A*. 2017 Mar 14;114(11):2952-2957.

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

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