

**Product Name** : MIPS521  
**Cat. No.** : PC-38014  
**CAS No.** : 1146188-19-3  
**Molecular Formula** : C<sub>19</sub>H<sub>10</sub>ClF<sub>6</sub>NOS  
**Molecular Weight** : 449.7954  
**Target** : Adenosine Receptor  
**Solubility** : 10 mM in DMSO



## Biological Activity

MIPS521 (MIPS-521) is a potent, positive allosteric modulator (PAM) of **adenosine A1 receptor (A1AR)**.

MIPS521 is more potent than VCP171 in reducing eEPSCs in spinal cord from nerve-injured animals, with a pEC<sub>50</sub> of 6.9 in electrophysiological recordings of dorsal horn neurons.

MIPS521 displays in vivo analgesic efficacy through modulation of elevated endogenous adenosine (ADO) that occurs in rat spinal cord in neuropathic pain states.

The maximal MIPS521-induced decrease in synaptic current amplitude is significantly greater in nerve-injured animals compared with sham surgery controls indicating a tissue- and context-specific sensitivity to differences in localised ADO tone in the disease models.

## References

Draper-Joyce CJ, et al. *Nature*. 2021 Sep;597(7877):571-576.

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

E-mail: tech@probechem.com