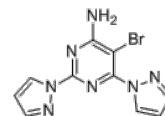


**Product Name** : PBF509  
**Cat. No.** : PC-35779  
**CAS No.** : 1337962-47-6  
**Molecular Formula** : C<sub>10</sub>H<sub>8</sub>BrN<sub>7</sub>  
**Molecular Weight** : 306.127  
**Target** : Adenosine Receptor  
**Solubility** : 10 mM in DMSO



### Biological Activity

PBF509 (Taminadenant, PBF-509, NIR 178) is a novel selective and potent **Adenosine A2A Receptor (A2AR)** antagonist, antagonizes A2AR agonist-mediated cAMP accumulation and impedance responses with KB values of 72.8 and 8.2 nM, respectively.

PBF509 (orally) antagonized haloperidol-mediated catalepsy, reduced pilocarpine-induced tremulous jaw movements and potentiated the number of contralateral rotations induced by L-3,4-dihydroxyphenylalanine (L-DOPA) in unilaterally 6-OHDA-lesioned rats.

PBF509 (3 mg/kg) inhibited L-DOPA-induced dyskinesia (LID), showing not only its efficacy on reversing parkinsonian motor impairments but also acting as antidyskinetic agent; increased responsiveness of human tumor-infiltrating lymphocytes when combined with anti-PD-1 or anti-PD-L1.

### References

Núñez F, et al. *Front Pharmacol.* 2018 Oct 19;9:1200.

Mediavilla-Varela M, et al. *Neoplasia.* 2017 Jul;19(7):530-536.

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

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