

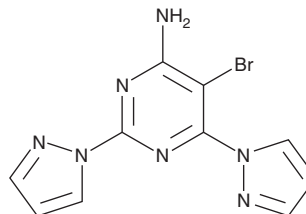
PRODUCT INFORMATION



Taminadenant

Item No. 32799

CAS Registry No.: 1337962-47-6
Formal Name: 5-bromo-2,6-di-1H-pyrazol-1-yl-4-pyrimidinamine
Synonyms: NIR 178, PBF-509
MF: C₁₀H₈BrN₇
FW: 306.1
Purity: ≥98%
Supplied as: A 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

Taminadenant is supplied as a solid. A stock solution may be made by dissolving the taminadenant in the solvent of choice, which should be purged with an inert gas. Taminadenant is soluble in organic solvents such as ethanol and DMSO. Taminadenant is soluble (≥10 mg/ml) in DMSO. Taminadenant is slightly soluble (0.1-1 mg/ml) in ethanol.

Description

Taminadenant is an adenosine A_{2A} receptor antagonist (K_i = 12 nM).¹ It is selective for adenosine A_{2A} receptors over adenosine A₁-, A_{2B}-, and A₃ receptors (K_is = 2,500, 1,000, and 5,000 nM, respectively). Taminadenant (1 μM) increases the levels of IFN-γ secreted by tumor-associated T cells isolated from patient-derived lung tumors when used in combination with an antibody targeting programmed cell death protein 1 (PD-1) or PD-1 ligand (PD-L1). It reduces the number of lung nodules in an MCA-205 murine fibrosarcoma model of lung metastasis when administered at a dose of 15 mg/kg per day. Taminadenant (3, 10, or 30 mg/kg) inhibits catalepsy induced by haloperidol (Item No. 12014) in a rat model of Parkinson's disease motor symptoms.²

References

1. Mediavilla-Varela, M., Castro, J., Chiappori, A., *et al.* A novel antagonist of the immune checkpoint protein adenosine A_{2A} receptor restores tumor-infiltrating lymphocyte activity in the context of the tumor microenvironment. *Neoplasia* **19**(7), 530-536 (2017).
2. Núñez, F., Taura, J., Camacho, J., *et al.* PBF509, an adenosine A_{2A} receptor antagonist with efficacy in rodent models of movement disorders. *Front. Pharmacol.* **9**, 1200 (2018).

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.

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