

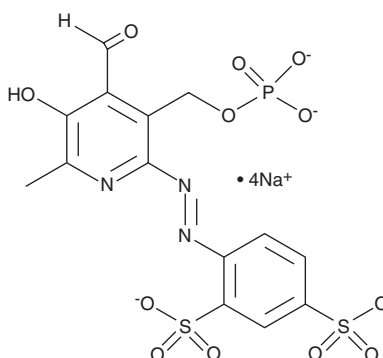
PRODUCT INFORMATION



PPADS (sodium salt)

Item No. 14537

CAS Registry No.: 192575-19-2
Formal Name: 4-[2-[4-formyl-5-hydroxy-6-methyl-3-[(phosphonoxy)methyl]-2-pyridinyl]diazonyl]-1,3-benzenedisulfonic acid, tetrasodium salt
Synonym: Pyridoxalphosphate-6-azophenyl-2',4'-disulfonic acid
MF: $C_{14}H_{10}N_3O_{12}PS_2 \cdot 4Na$
FW: 599.3
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 363, 482 nm
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PPADS (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the PPADS (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

P2X and P2Y purinergic receptors are ATP-sensitive receptors responsible for mediating a large variety of excitatory postsynaptic responses including fast transmission at central synapses, contraction of smooth muscle cells, platelet aggregation, macrophage activation, and apoptosis. PPADS is a non-selective P₂ purinergic antagonist that blocks recombinant P2X₁₋₅ (IC₅₀s = 1-2.6 μ M), native P2Y₂-like (IC₅₀ = ~0.9 mM), and recombinant P2Y₄ (IC₅₀ = ~15 mM) receptors.¹ PPADS antagonism of ATP-sensitive P₂ receptors produces neuroprotective effects in an ischemia model with permanent middle cerebral artery occlusion in spontaneously hypertensive rats.²

References

1. Lambrecht, G., Friebe, T., Grimm, U., *et al.* PPADS, a novel functionally selective antagonist of P₂ purinoceptor-mediated responses. *Eur. J. Pharmacol.* **217**(2-3), 217-219 (1992).
2. Lämmer, A.B., Beck, A., Grummich, B., *et al.* The P2 receptor antagonist PPADS supports recovery from experimental stroke *in vivo*. *PLoS One* **6**(5), (2011).

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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