

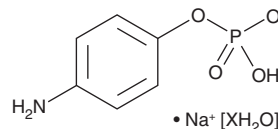
PRODUCT INFORMATION



4-Aminophenyl Phosphate (sodium salt hydrate)

Item No. 17293

Formal Name: 4-amino-phenol-1-(dihydrogen phosphate), monosodium salt, hydrate
MF: C₆H₇NO₄P • Na [XH₂O]
FW: 211.1
Purity: ≥95%
UV/Vis.: λ_{max}: 203, 233, 292 nm
Supplied as: A crystalline 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

4-Aminophenyl phosphate (sodium salt hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-aminophenyl phosphate (sodium salt hydrate) in the solvent of choice, which should be purged with an inert gas. 4-Aminophenyl phosphate (sodium salt hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 4-aminophenyl phosphate (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 4-aminophenyl phosphate (sodium salt hydrate) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

4-Aminophenyl phosphate is a substrate for alkaline phosphatase (ALP) that can be used in enzymatic reactions to quantify ALP activity.^{1,2} The enzymatic reaction results in the production of phenol, which is used to determine ALP concentrations.¹

References

1. Pemberton, R.M., Hart, J.P., Stoddard, P., *et al.* A comparison of 1-naphthyl phosphate and 4 aminophenyl phosphate as enzyme substrates for use with a screen-printed amperometric immunosensor for progesterone in cows' milk. *Biosens. Bioelectron.* **14(15)**, 495-503 (1999).
2. Akanda, M.R., Choe, Y.-L., and Yang, H. "Outer-sphere to inner-sphere" redox cycling for ultrasensitive immunosensors. *Anal. Chem.* **84(2)**, 1049-1055 (2012).

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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