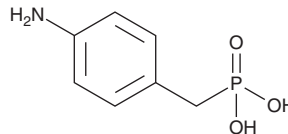


PRODUCT INFORMATION

4-Aminobenzylphosphonic Acid

Item No. 36029

CAS Registry No.: 5424-27-1
Formal Name: P-[(4-aminophenyl)methyl]-phosphonic acid
Synonyms: 4-ABPA, NSC 12117
MF: C₇H₁₀NO₃P
FW: 187.1
Purity: ≥95%
UV/Vis.: λ_{max}: 240 nm
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

4-Aminobenzylphosphonic acid is supplied as a solid. A stock solution may be made by dissolving the 4-aminobenzylphosphonic acid in the solvent of choice, which should be purged with an inert gas. 4-Aminobenzylphosphonic acid is slightly soluble in dimethyl formamide.

Description

4-Aminobenzylphosphonic acid is an inhibitor of alkaline phosphatase ($K_i = 1.1$ mM for the bovine intestine enzyme).¹ It has been used in affinity chromatography for the purification of alkaline phosphatase. 4-Aminobenzylphosphonic acid has also been used in electrochemical modification of glassy carbon electrodes.²

References

1. Landt, M., Boltz, S.C., and Butler, L.G. Alkaline phosphatase: Affinity chromatography and inhibition by phosphonic acids. *Biochemistry* **17**(5), 915-919 (1978).
2. Benjamin, O.D., Weissmann, M., and Bélanger, D. Electrochemical modification of carbon electrode with benzylphosphonic groups. *Electrochim. Acta* **122**, 210-217 (2014).

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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