

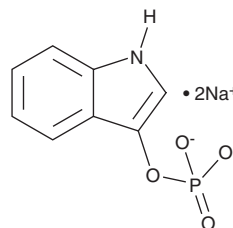
PRODUCT INFORMATION



3-Indoxyl Phosphate (sodium salt)

Item No. 33936

CAS Registry No.: 3318-43-2
Formal Name: 3-(dihydrogen phosphate), 1H-Indol-3-ol, disodium salt
Synonym: 3-IP
MF: $C_8H_6NO_4P \cdot 2Na$
FW: 257.1
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 222 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

3-Indoxyl phosphate (sodium salt) is supplied as a solid. Aqueous solutions of 3-indoxyl phosphate (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3-indoxyl phosphate (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-Indoxyl phosphate is a chromogenic and electrochemical substrate for alkaline phosphatase.^{1,2} Upon enzymatic cleavage by alkaline phosphatase, 3-indoxyl is released and subsequently oxidized to produce water-insoluble indigo, which can be quantified by colorimetric detection at 660 nm as a measure of alkaline phosphatase activity.¹ 3-Indoxyl phosphate can also be converted to water-soluble leucoindigo by reduction of indigo in alkaline solution by sodium dithionite, which can be quantified by colorimetric detection at 415 nm or voltametric detection as a measure of alkaline phosphatase activity.² 3-Indoxyl phosphate has been used in ELISAs.

References

1. Tsou, K.C. and Su, H.C.F. A new colorimetric method for the determination of alkaline phosphatase with indoxyl phosphate. *Anal. Biochem.* **11**(1), 54-64 (1965).
2. Fanjul-Bolado, P., González-García, M.B., and Costa-García, A. Detection of leucoindigo in alkaline phosphatase and peroxidase based assays using 3-indoxyl phosphate as substrate. *Anal. Chim. Acta* **534**(2), 231-238 (2005).

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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