

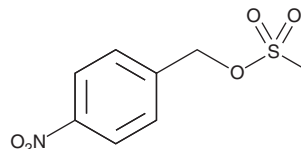
PRODUCT INFORMATION



p-Nitrobenzyl mesylate

Item No. 21456

CAS Registry No.: 39628-94-9
Formal Name: 4-nitro-benzenemethanol, 1-methanesulfonate
Synonyms: 4-Nitrobenzyl mesylate,
para-Nitrobenzyl mesylate, PNBM
MF: C₈H₉NO₅S
FW: 231.2
Purity: ≥99%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



Special Conditions: Store in desiccating conditions

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

Laboratory Procedures

p-Nitrobenzyl mesylate (PNBM) is supplied as a solid. A stock solution may be made by dissolving the PNBM in the solvent of choice. PNBM is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 100 mM.

Description

PNBM is a reagent that is used to alkylate thiophosphates, forming thiophosphate ester epitopes that can be recognized by specific antibodies.¹ Substrates phosphorylated with adenosine 5'-(γ -thio)-triphosphate (ATP γ S; Item No. 14957) or N⁶-benzyl-ATP γ S can be alkylated by PNBM.^{2,3} The tagged substrates can be isolated by immunoprecipitation or immunoaffinity purification, or they can be detected by immunoblotting.

References

1. Allen, J.J., Li, M., Brinkworth, C.S., *et al.* A semisynthetic epitope for kinase substrates. *Nat. Methods* **4(6)**, 511-516 (2007).
2. Kumar, V., Weng, Y.-C., Geldenhuys, W.J., *et al.* Generation and characterization of ATP analog-specific protein kinase C δ . *J. Biol. Chem.* **290(4)**, 1936-1951 (2015).
3. Leissing, F., Nomoto, M., Bocola, M., *et al.* Substrate thiophosphorylation by *Arabidopsis* mitogen-activated protein kinases. *BMC Plant Biol.* **16(48)** (2016).

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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