

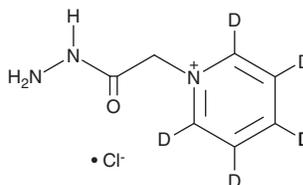
PRODUCT INFORMATION



Girard's Reagent P-d₅

Item No. 22005

CAS Registry No.: 1505505-87-2
Formal Name: 1-(2-hydrazinyl-2-oxoethyl)-pyridinium-2,3,4,5,6-d₅, monochloride
Synonyms: Girard P hydrazine-d₅, GirP-d₅, GP-d₅
MF: C₇H₅D₅N₃O • Cl
FW: 192.7
Chemical Purity: ≥95% (Girard's Reagent P)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
UV/Vis.: λ_{max}: 260 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

Girard's reagent P-d₅ is intended for use as an internal standard for the quantification of Girard's reagent P (Item No. 601541) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Girard's reagent P-d₅ is supplied as a crystalline solid. A stock solution may be made by dissolving the Girard's reagent P-d₅ in the solvent of choice, which should be purged with an inert gas. Girard's reagent P-d₅ is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Description

Girard's reagent P is a cationic hydrazine reagent.¹ It has been used as a derivatization reagent to quantify glycans, oxysterols, and 5-methylcytosine derivatives.²⁻⁴

References

1. Wheeler, O.H. The Girard Reagents. *Chem. Rev.* **62**(3), 205-221 (1962).
2. Wang, C., Wu, Z., Yuan, J., *et al.* Simplified quantitative glycomics using the stable isotope label Girard's reagent P by electrospray ionization mass spectrometry. *J. Proteome Res.* **13**(2), 372-384 (2014).
3. Griffiths, W.J., Abdel-Khalik, J., Crick, P.J., *et al.* Sterols and oxysterols in plasma from Smith-Lemli-Opitz syndrome patients. *J. Steroid Biochem. Mol. Biol.* **169**, 77-87 (2017).
4. Tang, Y., Xiong, J., Jiang, H.-P., *et al.* Determination of oxidation products of 5-methylcytosine in plants by chemical derivatization coupled with liquid chromatography/tandem mass spectrometry analysis. *Anal. Chem.* **86**(15), 7764-7772 (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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