Product Data Sheet

1,3,7-Trimethyluric acid

Cat. No.: HY-113327 CAS No.: 5415-44-1 Molecular Formula: $C_8H_{10}N_4O_3$ Molecular Weight: 210.19

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

Powder

4°C 2 years -80°C In solvent

-20°C

6 months -20°C 1 month

3 years

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BIOLOGICAL ACTIVITY

Description	1,3,7-Trimethyluric acid is the metabolite of caffeine. The metabolic ratio 1,3,7-Trimethyluric acid to caffeine can be evaluated as a biomarker to describe variability in CYP3A activity in a cohort $^{[1]}$.
IC ₅₀ & Target	Human Endogenous Metabolite

REFERENCES

Storage:

[1]. Y Benchekroun, et al. Isotopic effects on retention times of caffeine and its metabolites 1,3,7-trimethyluric acid, theophylline, theobromine and paraxanthine. J Chromatogr B Biomed Sci Appl. 1997 Jan 24;688(2):245-54.

[2]. Madelé van Dyk, et al. Identification of the caffeine to trimethyluric acid ratio as a dietary biomarker to characterise variability in cytochrome P450 3A activity. Eur J Clin Pharmacol. 2019 Sep;75(9):1211-1218.

Caution: Product has not been fully validated for medical applications. For research use only.

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