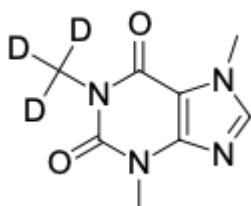


Caffeine-d3

<http://hk.lumiprobe.com/p/caffeine-d3>

Caffeine-d3 is deuterated caffeine and intended for use as an internal standard for the quantification of caffeine by GC- or LC-MS.

Caffeine is a naturally occurring central nervous system stimulant belonging to the methylxanthine class and is widely recognized as the most utilized psychoactive stimulant worldwide. Caffeine's primary mechanism of action involves its effects on adenosine receptors in the brain. Being both fat- and water-soluble component, caffeine easily crosses the blood-brain barrier and antagonizes all 4 adenosine receptor subtypes (A1, A2a, A2b, and A3). The antagonism of the A2a receptor is particularly responsible for caffeine's wakefulness effects. Caffeine increases renal blood flow, glomerular filtration, and sodium excretion, resulting in diuresis. Additionally, caffeine is a potent stimulator of gastric acid secretion and gastrointestinal motility.



外观: 白色粉末

分子量: 197.21

CAS 编号: 26351-03-1

分子式: $C_8H_7D_3N_4O_2$

溶解度: 水, DMSO, DMF, 乙醇

质量控制: NMR 1H 和 HPLC-MS (95+%、D: 98+%)

储存条件: 收到後 -20°C 避光保存 24 個月。運輸: 室溫最多可保存3週。乾燥。

法律声明: 本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試, 且未經明示或暗示授權用於其他任何用途, 包括但不限於體外診斷、人類或動物用途, 以及商業用途。