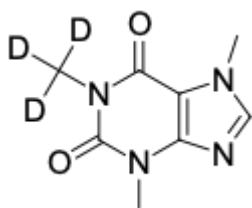


Caffeine-d3

<http://cn.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

分子

式: 量:

CAS 26351-03-1

编号:

分子

式: C₈H₇D₃N₄O₂

溶解

度:

水, DMSO, DMF, 乙醇

质量

控制:

NMR ¹H 和 HPLC-MS (95+%、D: 98+%)

储存

条件:

收到后

-20°C 避光保存 24 个月。运输: 室温下最多可保存3周。干燥。

法律

声明:

本产品仅供研究目的提供和销售。 本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试, 且未经明示或暗示授权用于其他任何用途, 包括但不限于体外诊断、人类或动物用途, 以及商业用途。