

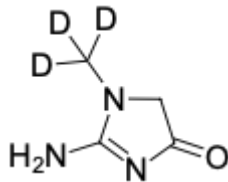
## Creatinine-d3

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

Creatinine is synthesized in the liver, kidneys, and pancreas, transported to muscle and brain tissue, where it is phosphorylated to phosphocreatine, while free creatine in muscle undergoes non-enzymatic conversion to creatinine. Creatinine levels in blood and urine serve as a key marker for estimating glomerular filtration rate. A persistent increase in blood creatinine indicates the development of renal impairment. Creatinine concentration is also used in screening for chronic conditions such as diabetes mellitus, hypertension, and heart failure. Urinary creatinine measurement is essential for clearance calculations and for diagnosing tubular disorders, particularly Fanconi syndrome.

Because creatinine-d3 is chemically identical to its unlabeled counterpart, it exhibits identical behavior during extraction, chromatography, and ionization. This makes it an optimal internal standard for pharmacokinetic, biochemical, and *in vitro* clinical laboratory assays.

It is used as an internal standard for the quantitative determination of creatinine by LC-MS/MS.



外观:

分子量: 116.14

CAS 编号: 143827-20-7

分子式: C<sub>4</sub>H<sub>4</sub>D<sub>3</sub>N<sub>3</sub>O

质量控制: NMR <sup>1</sup>H 和 HPLC-MS (95+ %, D: 98+ %)

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

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