

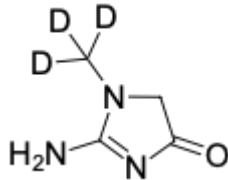
Creatinine-d3

<http://cn.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: 116.14
分子量:
CAS 143827-20-7
编号:
分子式: C₄H₄D₃N₃O
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。
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