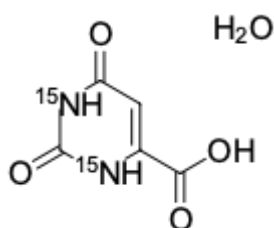


Orotic acid (1,3-¹⁵N₂) monohydrate

<http://hk.lumiprobe.com/p/orotic-acid-15n2>

Orotic acid-1,3-¹⁵N₂ (monohydrate) is the orotic acid labeled with a stable isotope of nitrogen and is intended for use as an internal standard for the quantification of orotic acid by GC- or LC-MS.

Orotic acid (6-Carboxyuracil) is an intermediate compound in the biosynthetic pathway of pyrimidines (orotic acid is converted to UMP by UMP synthase), primarily sourced in the body through a series of enzymatic reactions involving carbamoyl phosphate synthase II. Its production is influenced by various factors such as positive feedback from 5-phosphoribosyl-1-pyrophosphate and negative feedback from uridine triphosphate. The measurement of urinary orotic acid is useful in confirming the diagnosis of hereditary metabolic diseases. Orotic acid is a marker for measurement in routine newborn screening for urea cycle disorders.



外观:

分子量: 176.10

CAS 编号: 147687-63-6

分子式: C₅H₄(¹⁵N)₂O₄•H₂O

IUPAC 名称: 1,2,3,6-Tetrahydro-2,6-dioxo-4-pyrimidinecarboxylic Acid-15N₂ Monohydrate

溶解度:

质量控制: NMR ¹H和HPLC-MS (95+ %, N: 98+ %)

储存条件:

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。