

## Estriol-d3

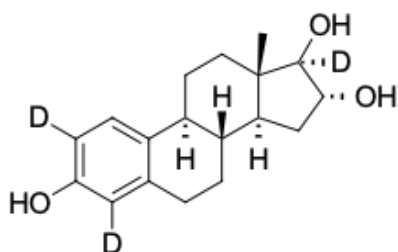
<http://www.lumiprobe.com/p/estriol-d3>

Estriol-(2,4,17)-d3 is a stable isotope-labeled analog of estriol in which three hydrogen atoms at positions 2, 4, and 17 are replaced with deuterium.

Estriol is one of the three major estrogens produced by the human body, alongside estradiol and estrone. It is a hydroxylated metabolite of estradiol. During pregnancy, the placenta produces substantial amounts of estriol, making it the predominant estrogen of the gestational period and a key marker of fetoplacental unit function. In addition to clinical diagnostics, the compound is employed in pharmacokinetic studies, drug development, and fundamental research on estrogen receptor interactions.

Our product features high isotopic and chemical purity, ensuring reliable reproducibility and minimal measurement error in even the most demanding analytical methodologies.

The compound is used as an internal standard for the quantitative determination of estriol by LC-MS/MS.



**Structure of Estriol-d3**

### General properties

Appearance: white powder

Molecular weight: 291.41

CAS number: 2687960-79-6

Molecular formula:  $C_{18}H_{21}D_3O_3$

Solubility: ethanol, methanol, DMSO, DMF

Quality control: NMR  $^1H$  and HPLC-MS (95+ %, D: 98+ %)

Storage conditions: 24 months after receipt at  $-20^{\circ}C$  in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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