
2'-Deoxyadenosine-d2

<http://www.lumiprobe.com/p/2-deoxyadenosine-d2>

2'-Deoxyadenosine-(ribose-5,5-d2) is a deuterated form of the nucleoside 2'-deoxyadenosine and is intended for use as an internal standard for the quantification of deoxyadenosine by LC-MS.

Deoxyadenosine is a nucleoside that is converted to deoxyinosine by the enzyme adenosine deaminase (ADA). Accumulation of deoxyadenosine in the absence of ADA exhibits higher toxicity in lymphoid cells and can inhibit the growth of kinase-deficient cells by inactivating S-adenosylhomocysteine hydrolase (AdoHcyase) and disrupting methylation processes. The triphosphorylated forms of deoxyadenosine analogs are potent inhibitors of ribonucleotide reductase (RNR).



Structure of 2'-Deoxyadenosine-d2

General properties

Appearance: white powder

Molecular weight: 253.26

Molecular formula: $C_{10}H_{11}D_2N_5O_3$

Solubility: in water

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

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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