Product Data Sheet

Folinic acid-d₄ calcium hydrate

Cat. No.: HY-17556S1

Molecular Formula: $C_{20}H_{17}D_4CaN_7O_7.xH_2O$

Target: Isotope-Labeled Compounds

Pathway: Others

Storage: -20°C, stored under nitrogen, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from

moisture)

BIOLOGICAL ACTIVITY

Description	Folinic acid-d ₄ -1 (Leucovorin-d ₄ -1) calcium hydrate is deuterated labeled Folinic acid (HY-17556). Folinic acid (Leucovorin) is a biological folic acid and is generally administered along with Methotrexate (MTX) (HY-14519) as a rescue agent to decrease MTX-induced toxicity.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Keshava, C., et al., Inhibition of methotrexate-induced chromosomal damage by folinic acid in V79 cells. Mutat Res, 1998. 397(2): p. 221-8.

[2]. Iqbal MP, et al. Effect of methotrexate and folinic acid on skeletal growth in mice. Acta Paediatr. 2003 Dec;92(12):1438-44.

[3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

Caution: Product has not been fully validated for medical applications. For research use only.

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