



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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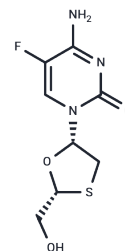
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## Emtricitabine

## Chemical Properties

CAS No. :	143491-57-0
Formula:	C <sub>8</sub> H <sub>10</sub> FN <sub>3</sub> O <sub>3</sub> S
Molecular Weight:	247.25
Appearance:	no data available
Storage:	store at low temperature, keep away from direct sunlight
	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Emtricitabine (FTC) (FTC), a nucleoside reverse transcriptase inhibitor, exhibits inhibition activity against human immunodeficiency virus (HIV) and hepatitis B virus.
Targets(IC50)	HIV Protease, Reverse Transcriptase
In vivo	Reproductive and developmental toxicology studies conducted on emtricitabine show a favorable pre-clinical safety profile. When administered orally at doses up to 1000 mg/kg/day, pregnant animals experienced emtricitabine exposure levels (AUC <sub>0→24</sub> ) approximately 60-fold (in mice) to 120-fold (in rabbits) higher than the human exposure at the recommended 200 mg daily dosage. Findings from a mouse fertility study indicate that emtricitabine does not impact fertility, sperm count, or early embryonic development. Additionally, there was no observed increase in malformations in mouse and rabbit embryofetal toxicology studies, nor did emtricitabine affect the development and fertility of the F1 progeny in a mouse pre- and post-natal study. These results underscore emtricitabine's lack of adverse effects on reproductive and developmental outcomes[6].
Cell Research	EA.hy926 cells were plated in a 12-, 24- or 96-well plates and grown in DMEM media supplemented with 3% FCS. Endothelial cells from PARP+/+ and PARP-/- mice were isolated and cultured. Cell viability was determined by the reduction of yellow MTT into a purple formazan product by mitochondrial dehydrogenases of metabolically active cells. Following the treatment period, the experimental medium was removed and 100 µL MTT (1 mg/mL) added. After 1 h incubation, the MTT solution was carefully removed and the purple crystals were solubilized in 100 µL of DMSO. The DMSO was transferred to an ELISA plate and absorbance measured at 550 nm with a 620 nm[3].

## Solubility Information

Solubility	DMSO: 50 mg/mL (202.22 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0445 mL	20.2224 mL	40.4449 mL
5 mM	0.8089 mL	4.0445 mL	8.089 mL
10 mM	0.4044 mL	2.0222 mL	4.0445 mL
50 mM	0.0809 mL	0.4044 mL	0.8089 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

Bao H, Yan J, Huang J, et al. Activation of endogenous retrovirus triggers microglial immuno-inflammation and contributes to negative emotional behaviors in mice with chronic stress. *Journal of Neuroinflammation*. 2023, 20(1):