Rp-dGTPαS

Cat. No.: HY-137618B CAS No.: 80902-29-0

Molecular Formula: $C_{10}H_{16}N_5O_{12}P_3S$

Molecular Weight: 523.25 Target: Others Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	Rp-dGTP α S is the nucleotide substrate of SAMHD1 and is one of the enantiomers of the dNTP α S nucleotide. SAMHD1 is an essential regulator of cellular dNTPs that limits virus (HIV-1, etc.) replication in the CD4+ myeloid lineage and resting T cells. The SAMHD1 tetrameric complex catalyzes the hydrolysis of Rp-dGTP α S into 2'-deoxynucleosides and triphosphates ^[1] .
IC ₅₀ & Target	$SAMHD1^{[1]}$

REFERENCES

[1]. Morris ER, et al. Probing the Catalytic Mechanism and Inhibition of SAMHD1 Using the Differential Properties of Rp- and Sp-dNTPaS Diastereomers. Biochemistry. 2021 Jun 1;60(21):1682-1698.

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