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Product Datasheet

DPTIP, CAS [[351353-48-5]] FBM-10-4394

Article Name	DPTIP, CAS [[351353-48-5]]
Biozol Catalog Number	FBM-10-4394
Supplier Catalog Number	10-4394
Alternative Catalog Number	FBM-10-4394-5MG,FBM-10-4394-25MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	Neutral sphingomyelinase 2 inhibitor...
Molecular Weight	378.45
Purity	>98% by HPLC NMR (Conforms)
Form	Light gray solid
CAS Number	[351353-48-5]
Formula	C ₂₁ H ₁₈ N ₂ O ₃ S

Application Notes

DPTIP is a selective, potent ($IC_{50} = 30 \text{ nM}$), and brain penetrant inhibitor of neutral sphingomyelinase 2 (nSMase2).¹ In a mouse model of brain injury, it inhibited IL-1 β -induced astrocyte-derived extracellular vesicle release which reduced cytokine upregulation and attenuation of infiltration of immune cells to the brain leading to decreased inflammation. DPTIP displayed potent antiviral activity against Zika and West Nile viruses (EC_{50} Vero cells: $0.26 \mu\text{M}$ and $1.56 \mu\text{M}$ respectively).² DPTIP acted synergistically with enzalutamide to significantly suppress cell proliferation, colony formation, and migration of metastatic castration resistant prostate cancer cells.³ It also reduced tumor size and weight in a prostate cancer mouse model.