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Product Datasheet

Dp44mT FBM-10-4951

Article Name	Dp44mT
Biozol Catalog Number	FBM-10-4951
Supplier Catalog Number	10-4951
Alternative Catalog Number	FBM-10-4951-5MG,FBM-10-4951-25MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	Metal chelator...
Molecular Weight	285.37
Purity	98% by TLC NMR (Conforms)
Form	Orange solid
CAS Number	[152095-12-0]
Formula	C14H15N5S

Application Notes	Dp44mT is a metal chelator with potent antitumor activity.^{1,2} It displayed an average IC₅₀ of 30 nM over 28 cancer cell lines (IC₅₀ range was 5 nM to 400 nM).² Dp44mT retained its antiproliferative activity in both etoposide-resistant MCF-7/VP clones (MCF-7 breast cancer cells) and vinblastine-resistant KB-VB1 clones (KB3-1 epidermoid carcinoma cells) with an IC₅₀ = 12 nM for both lines.² The potency of Dp44mT has been attributed to the high redox activity of the Dp44mT-Fe complex leading to cytotoxic ROS generation. The antitumor activity of Dp44mT may also be mediated by a redox active copper complex that causes cellular glutathione depletion and lysosomal damage.^{3,4} It also inhibited T-cell activation and prevented CD25 up-regulation via a copper-dependent mechanism.⁵
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