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## Product Datasheet

### **Dp44mT, CAS [[152095-12-0]] FBM-10-4951**

Article Name	Dp44mT, CAS [[152095-12-0]]
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.<sup>1,2</sup> It displayed an average IC<sub>50</sub> of 30 nM over 28 cancer cell lines (IC<sub>50</sub> range was 5 nM to 400 nM).<sup>2</sup> 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 IC<sub>50</sub> = 12 nM for both lines.<sup>2</sup> 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.<sup>3,4</sup> It also inhibited T-cell activation and prevented CD25 up-regulation via a copper-dependent mechanism.<sup>5</sup>