

## Product Information

### Dp44mT, Purity ≥98%

**Cat. No.:** X24-09-YM1364

**Size:** 10 mg; 25 mg; 50 mg; 100 mg

**MDL:** MFCD20527329

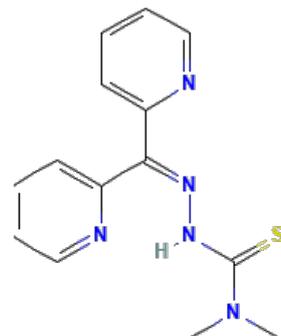
**CAS Number:** 152095-12-0

**Compound CID:** 10334137

**Synonym:** 152095-12-0; Iron chelator, Dp44mT;

3-(Dipyridin-2-ylmethylideneamino)-1,1-dimethylthiourea

**This product is for research use only and is not intended for diagnostic use.**



### Product Information

<b>Description</b>	Dp44mT, soluble in DMSO and ethanol and insoluble in water, is a potent iron chelator. The molecular weight of the compound is 285.37, and its molecular formula is C <sub>14</sub> H <sub>15</sub> N <sub>5</sub> S.
<b>Molecular Weight</b>	285.37
<b>Molecular Formula</b>	C <sub>14</sub> H <sub>15</sub> N <sub>5</sub> S
<b>IUPAC Name</b>	3-(Dipyridin-2-ylmethylideneamino)-1,1-dimethylthiourea
<b>InChI</b>	InChI=1S/C14H15N5S/c1-19(2)14(20)18-17-13(11-7-3-5-9-15-11)12-8-4-6-10-16-12/h3-10H,1-2H3,(H,18,20)
<b>InChI Key</b>	XOBIGRNRXCAMJQ-UHFFFAOYSA-N
<b>Canonical SMILES</b>	CN(C)C(=S)NN=C(C1=CC=CC=N1)C2=CC=CC=N2
<b>Isomeric SMILES</b>	CC(C)C[C@@H](C(=O)N[C@@H](CCCN=C(N)N)C(=O)N1CCC[C@H]1C(=O)NNC(=O)N)NC(=O)[C@@H](COC(C)(C)C)NC(=O)[C@H](CC2=CC=C(C=C2)O)NC(=O)[C@H](CO)NC(=O)[C@H](CC3=CNC4=CC=CC=C43)NC(=O)[C@H](CC5=CN=CN5)NC(=O)[C@@H]6CCC(=O)N6.CC(=O)O
<b>Form</b>	Lyophilized powder
<b>Purity</b>	≥98%
<b>Impurities</b>	Free from inappropriate visible particulates, foreign matter, discoloration, or other defects.
<b>Solubility</b>	<i>In vitro</i> : DMSO (warmed): 50 mg/mL (175.21 mM); Water: insoluble; Ethanol (warmed): 41 mg/mL (143.67 mM); <i>In vivo</i> : Propylene glycol: 1 mg/mL
<b>Identity</b>	Confirmed by NMR/HPLC/MS.
<b>Stability</b>	In its lyophilized form, the chemical remains stable for 36 months.
<b>Quality Level</b>	Research grade



**Applications**

Dp44mT can be studied extensively for its potential therapeutic applications in the treatment of iron-overloading diseases and certain types of cancers.

---

**Storage**

Store at -20°C, and keep desiccated.

---