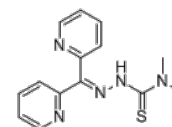


Product Name : Dp44mT
Cat. No. : PC-21429
CAS No. : 152095-12-0
Molecular Formula : C₁₄H₁₅N₅S
Molecular Weight : 285.37
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

Dp44mT is an iron chelator with selective anticancer activity, exhibits wide spectrum of potent antitumor activity that overcomes resistance to chemotherapeutics.

Dp44mT induces DNA double-strand breaks quantified as S139 phosphorylated histone foci (gamma-H2AX) and Comet tails induced in MDA-MB-231 cells.

Dp44mT causes up-regulation of the Fe-responsive tumor growth and metastasis suppressor NdrG1 in the tumor but not in the liver, indicating a potential mechanism of selective anticancer activity.

Dp44mT is cytotoxic to breast cancer cells, at least in part, due to selective inhibition of top2alpha.

References

Yu Y, et al. Mol Pharmacol. 2011 Jun;79(6):921-31.

Debebe Z, et al. Mol Pharmacol. 2011 Jan;79(1):185-96.

Rao VA, et al. Cancer Res. 2009 Feb 1;69(3):948-57.

Whitnall M, et al. Proc Natl Acad Sci U S A. 2006 Oct 3;103(40):14901-6.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com