

Data Sheet

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Product Name : CYP1B1 inhibitor TMS

 Cat. No.
 :
 PC-45614

 CAS No.
 :
 24144-92-1

 Molecular Formula
 :
 $C_{18}H_{20}O_4$

 Molecular Weight
 :
 300.349

Target : Cytochrome P450 (CYPs)

Solubility : 10 mM in DMSO

Biological Activity

TMS is a potent and selective inhibitor of the EROD activity of P450 1B1 (CYP1B1) with IC50 of 6 nM.

TMS exhibits 50-fold selectivity for P450 1B1 over P450 1A1 (IC50=300 nM) and 500-fold selectivity for P450 1B1 over P450 1A2 (IC50=3 uM).

TMS blocks the conversion of estradiol to 4-OH-estradiol, inhibits tubulin polymerization and microtubule formation, causes cell cycle block at the G2-M phase, and induces apoptosis.

TMS significantly attenuates hypoxic PAH and hypoxic+SU5416 PAH in vivo (3mg/kg, i.p.).

References

Chun YJ, et al. *Cancer Res*. 2001 Nov 15;61(22):8164-70.

Park H, et al. *Cancer Res*. 2007 Jun 15;67(12):5717-26.

White K, et al. *Circulation*. 2012 Aug 28;126(9):1087-98.

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

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