## TH1760

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway: Storage:	HY-139193         2567914-01-4         C <sub>20</sub> H <sub>18</sub> N <sub>4</sub> O <sub>5</sub> S         426.45         Others         Others         Please store the product under the recommended conditions in the Certificate of Analysis.	
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Disconce A entropy         Pescription       TH1760 is an inhibitor of NUDIX-type 15 (NUDT15) with an IC <sub>50</sub> value of 25 nM. TH1760 sensitizes cells to 6-thioguanine by enhancing the accumulation of 6-thio- (d) GTP in nucleic acids. TH1760 enhances the anti-leukemia effect of thiopurine <sup>11</sup> [12].         Irc <sub>50</sub> & Target       NUDIX-type 15, NUDT15 <sup>[1]</sup> In Vitre       TH1760 (0-100 µM) maintains the thermal denaturation of NUD115 with dose-dependent manner <sup>[1]</sup> .         TH1760 (0, 5, 10, 20 and 50 µM) increases the accumulation of thiopurine (6-TG) with dose-dependent manner <sup>[1]</sup> .         TH1760 (10 µM; 16 h) promotes the accumulation and incorporation of 6-TG. TH1760. TH1760 increases the expression of YH2AX, caspase3, Cleaved and CPARP in HL-60 cells <sup>[1]</sup> .         TH1760 (10 µM; 16 h) promotes the accumulation and incorporation of 6-TG in AL-60 cells. TH1760 increases the expression of YH2AX, caspase3, Cleaved and CPARP in HL-60 cells <sup>[1]</sup> .         TH1760 (10 µM; 16 h) promotes the accumulation and incorporation of 6-TG in a dose dependent manner <sup>[2]</sup> .         MCE has not independently confirmed the accuracy of these methods. They are for reference only.         Western Blot Analysis <sup>[2]</sup> Cell Line:       HC116 cells.         Concentration:       10 µM.         Incubation Time:       3h.         Result:       3h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than st40.	PIOLOCICAL ACTIV			
Description       TH1760 is an inhibitor of NUDIX-type 15 (NUDT15) with an IC <sub>50</sub> value of 25 nM. TH1760 sensitizes cells to 6-thioguanine by enhancing the accumulation of 6-thio- (d) GTP in nucleic acids. TH1760 enhances the anti-leukemia effect of thiopurine <sup>[1]</sup> [2].         In Vitro       TH1760 (0-100 µM) maintains the thermal denaturation of NUDT15 with dose-dependent manner <sup>[1]</sup> .         TH1760 (0, 0, 5, 10, 20 and 50 µM) increases the accumulation of thiopurine (6-TG) with dose-dependent manner <sup>[1]</sup> .         TH1760 (10, µM) increases the sensitivity of HCT116 and HCT116 3-6 cells to 6-TG. TH1760 increases the expression of yl20X, caspase3, Cleaved and CPARP in HL-60 cells <sup>11</sup> .         TH1760 (10, µM) increases the accumulation and incorporation of 6-TG in HL-60 cells. TH1760 increases the expression of yl20X, caspase3, Cleaved and CPARP in HL-60 cells <sup>11</sup> .         TH1760 (10, µM) increases the accumulation and incorporation of 6-TG in a dose dependent manner <sup>12</sup> .         Cell Line:       HCT116 cells.         Concentration:       10 µM.         Incubation Time:       4 h.         Result:       Inhibited the expression of NUDT15.         Western Blot Analysis <sup>[2]</sup> Cell Line:       AML HL-60 cells.         Concentration:       10 µM.         Incubation Time:       3 h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than 548.	BIOLOGICAL ACTIV			
ICso & Target       NUDIX-type 15, NUDT15 <sup>[1]</sup> In Vitro       TH1760 (0.100 µM) maintains the thermal denaturation of NUDT15 with dose-dependent manner <sup>[1]</sup> . TH1760 (0, 5, 10, 20 and 50 µJW) increases the accumulation of thiopurine (6-TG) with dose-dependent manner in NB4 and H_106 cotlis <sup>[1]</sup> . TH1760 (10 µM) increases the ascumulation and incorporation of 6-TG. TH1760. TH1760 ins more sensitive to BJ- RAS cells than BJ-hTERT cells <sup>[1]</sup> . TH1760 (10 µM), 16 h) promotes the accumulation and incorporation of 6-TG in HL-60 cells. TH1760 increases the expression of yH2AX, caspasa3, Cleaved and PAPP in HL-60 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis <sup>[1]</sup> Cell Line:       HCT116 cells. Concentration:       10 µM. Incubation Time:         Result:       Inhibited the expression of NUDT15.         Western Blot Analysis <sup>[2]</sup> Cell Line:       AML HL-60 cells. Concentration:         Cell Line:       AML HL-60 cells.       Concentration:         Incubation Time:       3 h.       Result:         Result:       10 µM. Incubation Time:       3 h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than 548.	Description	TH1760 is an inhibitor of NUDIX-type 15 (NUDT15) with an IC <sub>50</sub> value of 25 nM. TH1760 sensitizes cells to 6-thioguanine by enhancing the accumulation of 6-thio- (d) GTP in nucleic acids. TH1760 enhances the anti-leukemia effect of thiopurine <sup>[1][2]</sup> .		
In Vitro       TH1760 (0-100 μM) maintains the thermal denaturation of NUDT15 with dose-dependent manner <sup>[1]</sup> .         TH1760 (0, 5, 10, 20 and 50 μM) increases the accumulation of thiopurine (6-TG) with dose-dependent manner in NB4 and HL-60 cells <sup>[1]</sup> .         TH1760 (10 μM) increases the sensitivity of HCT116 and HCT116 3-6 cells to 6-TG. TH1760. TH1760 is more sensitive to BJ-RAS cells than BJ-hTERT cells <sup>[1]</sup> .         TH1760 (10 μM) increases the accumulation and incorporation of 6-TG in HL-60 cells. TH1760 increases the expression of γH2AX, caspase3, Cleaved and cPARP in HL-60 cells <sup>[1]</sup> .         TH1760 (0.05, 0.17, 0.55 and 1.8 μM; 4 d) enhances the anti-leukemia effect of 6-TG in a dose dependent manner <sup>[2]</sup> .         MCE has not independently confirmed the accuracy of these methods. They are for reference only.         Westerm Blot Analysis <sup>[1]</sup> Cell Line:       HCT116 cells.         Concentration:       10 μM.         Incubation Time:       4 h.         Result:       Inhibited the expression of NUDT15.         Westerm Blot Analysis <sup>[2]</sup> Cell Line:         Cell Line:       AML HL-60 cells.         Concentration:       10 μM.         Incubation Time:       3 h.         Result:       3 h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than 548.	IC <sub>50</sub> & Target	NUDIX-type 15, NUDT15 <sup>[1]</sup>		
Cell Line:HCT116 cells.Concentration:10 μM.Incubation Time:4 h.Result:Inhibited the expression of NUDT15.Western Blot Analysis <sup>[2]</sup> Western Blot Analysis <sup>[2]</sup> Cell Line:AML HL-60 cells.Concentration:10 μM.Incubation Time:3 h.Result:Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.	In Vitro	TH1760 (0-100 $\mu$ M) maintains the thermal denaturation of NUDT15 with dose-dependent manner <sup>[1]</sup> . TH1760 (0, 5, 10, 20 and 50 $\mu$ M) increases the accumulation of thiopurine (6-TG) with dose-dependent manner in NB4 and HL-60 cells <sup>[1]</sup> . TH1760 (10 $\mu$ M) increases the sensitivity of HCT116 and HCT116 3-6 cells to 6-TG. TH1760. TH1760 is more sensitive to BJ-RAS cells than BJ-hTERT cells <sup>[1]</sup> . TH1760 (10 $\mu$ M; 16 h) promotes the accumulation and incorporation of 6-TG in HL-60 cells. TH1760 increases the expression of $\gamma$ H2AX, caspase3, Cleaved and cPARP in HL-60 cells <sup>[1]</sup> . TH1760 (0.05, 0.17, 0.55 and 1.8 $\mu$ M; 4 d) enhances the anti-leukemia effect of 6-TG in a dose dependent manner <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis <sup>[1]</sup>		
Concentration:10 μM.Incubation Time:4 h.Result:Inhibited the expression of NUDT15.Western Blot Analysis <sup>[2]</sup> Cell Line:AML HL-60 cells.Concentration:10 μM.Incubation Time:3 h.Result:Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.		Cell Line:	HCT116 cells.	
Incubation Time:4 h.Result:Inhibited the expression of NUDT15.Western Blot Analysis <sup>[2]</sup> Western Blot Analysis <sup>[2]</sup> Cell Line:AML HL-60 cells.Concentration:10 μM.Incubation Time:3 h.Result:Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.		Concentration:	10 μΜ.	
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Western Blot Analysis <sup>[2]</sup> Cell Line:AML HL-60 cells.Concentration:10 μM.Incubation Time:3 h.Result:Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.		Result:	Inhibited the expression of NUDT15.	
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Concentration:       10 μM.         Incubation Time:       3 h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.		Cell Line:	AML HL-60 cells.	
Incubation Time:       3 h.         Result:       Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.		Concentration:	10 μM.	
Result: Significantly inhibited the expression of NUDT15 when the temperature was higher than 54 <sup>III</sup> .		Incubation Time:	3 h.	
		Result:	Significantly inhibited the expression of NUDT15 when the temperature was higher than 54⊠.	

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## Product Data Sheet

## REFERENCES

[1]. Zhang SM, et al. Development of a chemical probe against NUDT15. Nat Chem Biol. 2020 Oct;16(10):1120-1128.

[2]. Rehling D, et al. Crystal structures of NUDT15 variants enabled by a potent inhibitor reveal the structural basis for thiopurine sensitivity. J Biol Chem. 2021 Jan-Jun;296:100568.

## Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA