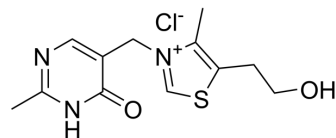


Oxythiamine chloride

Cat. No.:	HY-107430B
CAS No.:	582-36-5
Molecular Formula:	C ₁₂ H ₁₆ ClN ₃ O ₂ S
Molecular Weight:	301.79
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Oxythiamine (Hydroxythiamine) chloride, an analogue of anti-metabolite, can suppress the non-oxidative synthesis of ribose and induce cell apoptosis. Oxythiamine is a thiamine antagonist and inhibits transketolase (TK). Oxythiamine chloride inhibits cancer cell apoptosis and inhibits cell proliferation^{[1][2][3]}.

CUSTOMER VALIDATION

- Nat Commun. 2022 Oct 17;13(1):6121.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Wang J, et al. Inhibition of transketolase by oxythiamine altered dynamics of protein signals in pancreatic cancer cells. *Exp Hematol Oncol*. 2013 Jul 27;2:18.
- [2]. Bai L, et al. A dose- and time-dependent effect of oxythiamine on cell growth inhibition in non-small cell lung cancer. *Cogn Neurodyn*. 2022 Jun;16(3):633-641.
- [3]. Raïs B, et al. Oxythiamine and dehydroepiandrosterone induce a G1 phase cycle arrest in Ehrlich's tumor cells through inhibition of the pentose cycle. *FEBS Lett*. 1999 Jul 30;456(1):113-8.

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

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