Inhibitors

**Proteins** 

Pathway:

## **Product** Data Sheet

## L-Lysine α-oxidase

Cat. No.: HY-P2965 CAS No.: 70132-14-8 Target: Others

L-Lysine alpha-oxidase

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

Others

## **BIOLOGICAL ACTIVITY**

Description	L-Lysine $\alpha$ -oxidase is a potent anticancer agent. L-Lysine $\alpha$ -oxidase also a L-amino acid oxidase, deaminates L-lysine with the yield of H2O2, ammonia, and $\alpha$ -keto- $\epsilon$ -aminocaproate. L-Lysine $\alpha$ -oxidase shows cytotoxicity and anticancer activity [1][2] .	
In Vitro	L-Lysine $\alpha$ -oxidase shows cytotoxicity for HT29, LS174T, MCF7, SKOV3, PC3, K562 cells <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	L-Lysine α-oxidase (150 U/kg on day 2 and 75 U/kg on days 4, 6, 8, and 10; i.p.) shows anticancer activity in human tumor models <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	6-9 weeks, Female Balb/c nude mice (SKBR3, HCT116, Bro, SKOV3, Alex, T47D, LS174T tumor models) <sup>[2]</sup>
	Dosage:	150 U/kg on day 2 and 75 U/kg on days 4, 6, 8, and 10
	Administration:	I.p.; 10 U/ml saline solution
	Result:	Caused inhibition of tumor growth with maximal T/C of 49, 12, 51, 35, 54,36, 37% for SKBR3, HCT116, Bro, SKOV3, Alex, T47D, LS174T tumor models, respectively.

## **REFERENCES**

 $[1]. \ Lukasheva \ EV, et \ al. \ L-Lysine \ \alpha-Oxidase: Enzyme \ with \ Anticancer \ Properties. \ Pharmaceuticals \ (Basel). \ 2021 \ Oct \ 22;14(11):1070.$ 

 $[2]. Pokrovsky VS, et al. Enzymatic properties and anticancer activity of L-lysine \\ \alpha-oxidase from Trichoderma cf. aureoviride Rifai BKMF-4268D. Anticancer Drugs. 2013$ Sep;24(8):846-51.

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