(Rac)-Tanomastat

MedChemExpress

Cat. No.:	HY-12168B	
CAS No.:	179545-76-7	
Molecular Formula:	C ₂₃ H ₁₉ ClO ₃ S	O ↓ OH ₽
Molecular Weight:	410.91	S
Target:	MMP	
Pathway:	Metabolic Enzyme/Protease	Cl
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

(Rac)-Tanomastat ((Rac)-BAY 12-9566) is the racemate of Tanomastat. Tanomastat (BAY 12-9566) is an orally bioavailable, non-peptidic biphenyl matrix metalloproteinases (MMPs) inhibitor with a Zn-binding carboxyl group. The K _i values are 11, 143, 301, and 1470 nM for MMP-2, MMP-3, MMP-9, MMP-13 respectively. Tanomastat shows anti-invasive and antimetastatic activity in several experimental tumor models ^{[1][2][3]} .				
MMP-2 11 nM (Ki)	MMP-3 143 nM (Ki)	MMP-9 301 nM (Ki)	MMP-13 1470 nM (Ki)	
Tanomastat (BAY 12-9566) (1-10000 nM; 6 hours) prevents matrix invasion by endothelial cells in a concentration-dependent manner (IC ₅₀ =840 nM), without affecting cell proliferation ^[2] . Tanomastat (BAY 12-9566) (1-00 μM; 5 days) inhibits tubule formation completely at 15-100 μM ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.				
Tanomastat (BAY 12-9566) (10 toxic effect, and inhibits the nu MCE has not independently co Animal Model: Dosage: Administration: Result:	stat (BAY 12-9566) (100 mg/kg; p.o.; daily for a 7-week period) inhibits local tumor regrowth without causing any ect, and inhibits the number and volume of lung metastases ^[3] . not independently confirmed the accuracy of these methods. They are for reference only. lodel: Six- to eight-week-old female BALB/c nude mice (bearing MDA-MB-435 cells) ^[3] 100 mg/kg tration: P.o.; daily for a 7-week period Inhibited local tumor regrowth by 58% without causing any toxic effect, and inhibited the number and volume of lung metastases by 57 and 88%, respectively.			
	(Rac)-Tanomastat ((Rac)-BAY 1 non-peptidic biphenyl matrix i 143, 301, and 1470 nM for MMF activity in several experimenta MMP-2 11 nM (Ki) Tanomastat (BAY 12-9566) (1-1 manner (IC ₅₀ =840 nM), withou Tanomastat (BAY 12-9566) (1-0 MCE has not independently co Tanomastat (BAY 12-9566) (10 toxic effect, and inhibits the nu MCE has not independently co Animal Model: Dosage: Administration: Result:	(Rac)-Tanomastat ((Rac)-BAY 12-9566) is the racemate of Tanon non-peptidic biphenyl matrix metalloproteinases (MMPs) inhibit 143, 301, and 1470 nM for MMP-2, MMP-3, MMP-9, MMP-13 resp activity in several experimental tumor models ^{[1][2][3]} . MMP-2 MMP-3 11 nM (Ki) 143 nM (Ki) Tanomastat (BAY 12-9566) (1-10000 nM; 6 hours) prevents matemanner (IC ₅₀ =840 nM), without affecting cell proliferation ^[2] . Tanomastat (BAY 12-9566) (1-00 μM; 5 days) inhibits tubule for MCE has not independently confirmed the accuracy of these metatoxic effect, and inhibits the number and volume of lung metas MCE has not independently confirmed the accuracy of these metatoxic effect, and inhibits the number and volume of lung metas MCE has not independently confirmed the accuracy of these metatoxic effect. Animal Model: Six- to eight-week-old female B Dosage: 100 mg/kg Administration: P.o.; daily for a 7-week period Result: Inhibited local tumor regrowth number and volume of lung metas	(Rac)-Tanomastat ((Rac)-BAY 12-9566) is the racemate of Tanomastat. Tanomastat (BAY 12-956 non-peptidic biphenyl matrix metalloproteinases (MMPs) inhibitor with a Zn-binding carboxyl g 143, 301, and 1470 nM for MMP-2, MMP-3, MMP-9, MMP-13 respectively. Tanomastat shows anti activity in several experimental tumor models ^[1] [2][3]. MMP-2 MMP-3 MMP-9 11 nM (Ki) 143 nM (Ki) 301 nM (Ki) Tanomastat (BAY 12-9566) (1-10000 nM; 6 hours) prevents matrix invasion by endothelial cells i manner (IC ₅₀ =840 nM), without affecting cell proliferation ^[2] . Tanomastat (BAY 12-9566) (1-00 µM; 5 days) inhibits tubule formation completely at 15-100 µM MCE has not independently confirmed the accuracy of these methods. They are for reference of toxic effect, and inhibits the number and volume of lung metastases ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference of Animal Model: Six- to eight-week-old female BALB/c nude mice (bearing MDA-1 Dosage: 100 mg/kg Administration: P.o.; daily for a 7-week period Result: Inhibited local tumor regrowth by 58% without causing any tox number and volume of lung metastases by 57 and 88%, respect	

REFERENCES

[1]. Leung D, et al. Protease inhibitors: current status and future prospects. J Med Chem. 2000 Feb 10;43(3):305-41.

[2]. Gatto C, et al. BAY 12-9566, a novel inhibitor of matrix metalloproteinases with antiangiogenic activity. Clin Cancer Res. 1999 Nov;5(11):3603-7.

[3]. Nozaki S, et al. Activity of biphenyl matrix metalloproteinase inhibitor BAY 12-9566 in a human breast cancerorthotopic model. Clin Exp Metastasis. 2003;20(5):407-12.

Product Data Sheet

[4]. Harold Clinton Eugene Kluender, et al. Substituted 4-biarylbutyric or 5-biarylpentanoic acids and derivatives as matrix metalloprotease inhibitiors. W01996015096A1.

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

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