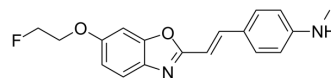


BF-168

Cat. No.:	HY-112830
CAS No.:	634911-47-0
Molecular Formula:	C ₁₈ H ₁₇ FN ₂ O ₂
Molecular Weight:	312.34
Target:	Amyloid-β
Pathway:	Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years



* The compound is unstable in solutions, freshly prepared is recommended.

SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (160.08 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.2016 mL	16.0082 mL	32.0164 mL
5 mM	0.6403 mL	3.2016 mL	6.4033 mL
10 mM	0.3202 mL	1.6008 mL	3.2016 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

BF-168, a candidate probe for PET, is found to specifically recognize both neuritic and diffuse plaques, with a K_i of 6.4 nM for Aβ1-42.

IC₅₀ & Target

Ki: 6.4 nM (Aβ1-42)^[1].

In Vitro

BF-168, a styrylbenzoxazole derivative, is a potent agent that selectively recognizes SPs and NFTs in AD brain. BF-168 is a candidate probe for PET and is found to specifically recognize both neuritic and diffuse plaques, with a K_i of 6.4 nM for Aβ1-42^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Intravenous injection of BF-168 in PS1/APP and APP23 transgenic mice result in specific in vivo labeling to both compact and diffuse amyloid deposits in the brain. In addition, ¹⁸F-radiolabeled BF-168 demonstrates abundant initial brain uptake (3.9% injected dose/gm at 2 min after injection) and fast clearance (t_{1/2}=24.7 min) after intravenous administration in normal mice. Furthermore, autoradiograms of brain sections from APP23 transgenic mice at 180 min after intravenous injection of [¹⁸F]BF-168 shows selective labeling of brain amyloid deposits with little nonspecific binding^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Okamura N, et al. Styrylbenzoxazole derivatives for in vivo imaging of amyloid plaques in the brain. J Neurosci. 2004 Mar 10;24(10):2535-41.

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