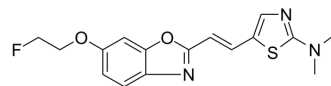


BF 227

Cat. No.:	HY-105252A
CAS No.:	845647-80-5
Molecular Formula:	C ₁₆ H ₁₆ FN ₃ O ₂ S
Molecular Weight:	333.38
Target:	Amyloid-β
Pathway:	Neuronal Signaling
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (187.47 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.9996 mL	14.9979 mL	29.9958 mL
	5 mM	0.5999 mL	2.9996 mL	5.9992 mL
	10 mM	0.3000 mL	1.4998 mL	2.9996 mL

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

BIOLOGICAL ACTIVITY

Description

BF 227 is a candidate for an amyloid imaging probe for PET, with a K_i of 4.3 nM for Aβ1-42 fibrils.

IC₅₀ & Target

K_i: 4.3 nM (Aβ1-42)^[1].

In Vitro

BF-227 has a high binding affinity for Aβ1-42 fibrils. The K_i value for Aβ1-42 fibrils in competitive binding assay using [¹²⁵I]BF-180 is 4.3±1.3 nM in BF-227 (K_d value of [¹²⁵I]BF-180: 10.8±1.5 nM)_[1]. [¹¹C]BF-227 is a PET tracer. The AUC for BF-227 (0.994) is much higher than that for FDG (0.839), indicating that BF-227 is more sensitive as well as more specific than FDG in diagnosing AD^[2].

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

REFERENCES

- [1]. Kudo Y, et al. Development of amyloid imaging PET probes for an early diagnosis of Alzheimer's disease. Minim Invasive Ther Allied Technol. 2006;15(4):209-13.
- [2]. Furukawa K, et al. Amyloid PET in mild cognitive impairment and Alzheimer's disease with BF-227: comparison to FDG-PET. J Neurol. 2010 May;257(5):721-7.

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

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