K114

Cat. No.: HY-103470

CAS No.: 872201-12-2

Molecular Formula: $C_{22}H_{17}BrO_2$

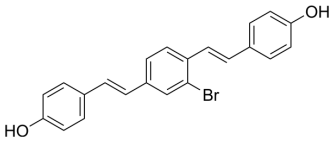
Molecular Weight: 393.27

Target: Fluorescent Dye

Pathway: Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (254.28 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5428 mL	12.7139 mL	25.4278 mL
	5 mM	0.5086 mL	2.5428 mL	5.0856 mL
	10 mM	0.2543 mL	1.2714 mL	2.5428 mL

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

BIOLOGICAL ACTIVITY

Description

K114, a fluorescent Congo Red analogue, binds tightly to amyloid fibrils with an EC_{50} of 20-30 nM[1]. K114 is an efficient detector of semen-derived enhancer of virus infection (SEVI)[2].

In Vitro

K114's unusually low buffer fluorescence is due to self-quenching in sedimentable aggregates or micelles which upon interacting with amyloid fibrils undergo an enhancement in fluorescence intensity and shifts in the excitation and emission spectra[1].

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

REFERENCES

[1]. LeVine H 3rd, et al. Mechanism of A beta(1-40) fibril-induced fluorescence of (trans,trans)-1-bromo-2,5-bis(4-hydroxystyryl)benzene (K114). Biochemistry. 2005 Dec 6;44(48):15937-43.

[2]. Selmani V, et al. K114 (trans, trans)-bromo-2,5-bis(4-hydroxystyryl)benzene is an efficient detector of cationic amyloid fibrils. Protein Sci. 2015 Mar;24(3):420-5.

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

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