# **Product** Data Sheet

## **CRANAD-2**

Cat. No.: HY-103242 CAS No.: 1193447-34-5 Molecular Formula:  $C_{23}H_{25}BF_{2}N_{2}O_{2}$ 

Molecular Weight: 410.26 Amyloid-β Target:

Pathway: **Neuronal Signaling** Storage: 4°C, protect from light

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

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 2.08 mg/mL (5.07 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4375 mL	12.1874 mL	24.3748 mL
	5 mM	0.4875 mL	2.4375 mL	4.8750 mL
	10 mM			

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

## **BIOLOGICAL ACTIVITY**

Description

CRANAD-2 is a near-infrared (NIR) Aß plaque-specific fluorescent probe. CRANAD 2 penetrates the blood brain barrier and has a high affinity for A $\beta$  aggregates with a  $K_d$  of 38 nM<sup>[1][2]</sup>.

#### **REFERENCES**

[1]. Ran C, et al. Design, synthesis, and testing of difluoroboron-derivatized curcumins as near-infrared probes for in vivo detection of amyloid-beta deposits. J Am Chem Soc. 2009 Oct 28;131(42):15257-61.

[2]. Ran C, et al. Non-conjugated small molecule FRET for differentiating monomers from higher molecular weight amyloid beta species. PLoS One. 2011 Apr 29;6(4):e19362.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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

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