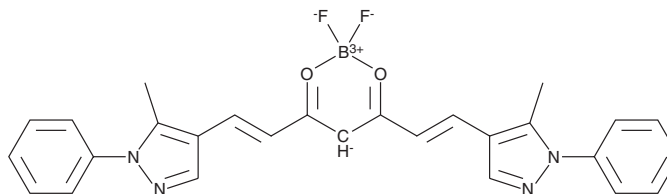


PRODUCT INFORMATION

CRANAD 28

Item No. 19816

CAS Registry No.: 1623747-97-6
MF: $C_{27}H_{23}BF_2N_4O_2$
FW: 484.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 245, 479 nm
Ex./EM. Max: 498/578 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CRANAD 28 is supplied as a crystalline solid. A stock solution may be made by dissolving the CRANAD 28 in the solvent of choice. CRANAD 28 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of CRANAD 28 in these solvents is approximately 2 mg/ml.

CRANAD 28 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CRANAD 28 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CRANAD 28 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CRANAD 28 is a curcumin derivative and non-conjugated fluorescent affinity probe for the detection of amyloid- β (A β) *in vitro* and *in vivo* that has excitation/emission spectra of 498/578 nm, respectively.¹ It binds to various forms of A β , including A β 40 monomers and aggregates, as well as A β 42 monomers, dimers, and oligomers (K_d s = 68.8, 52.4, 159.7, 162.9, and 85.7 nM, respectively). When bound to A β , the fluorescence intensity decreases, in contrast to similar curcumin-based fluorescent probes. CRANAD 28 labels amyloid plaques and cerebral amyloid angiopathy both in APP/PS1 mouse brain sections and in live mice following i.v. administration. It also inhibits copper-induced and naturally occurring A β crosslinking.

Reference

1. Zhang, X., Tian, Y., Yuan, P., *et al.* A bifunctional curcumin analogue for two-photon imaging and inhibiting crosslinking of amyloid beta in Alzheimer's disease. *Chem. Commun. (Camb.)* **50(78)**, 11550-11553 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM