

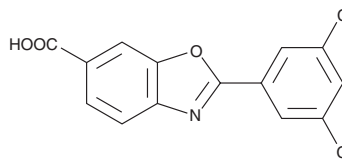
# PRODUCT INFORMATION



## Tafamidis

Item No. 13694

**CAS Registry No.:** 594839-88-0  
**Formal Name:** 2-(3,5-dichlorophenyl)-6-benzoxazolecarboxylic acid  
**Synonym:** PF-06291826  
**MF:** C<sub>14</sub>H<sub>7</sub>Cl<sub>2</sub>NO<sub>3</sub>  
**FW:** 308.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 214, 301, 310, 324 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Tafamidis is supplied as a crystalline solid. A stock solution may be made by dissolving the tafamidis in the solvent of choice, which should be purged with an inert gas. Tafamidis is soluble in organic solvents such as ethanol and DMSO. The solubility of tafamidis in these solvents is approximately 1 and 5 mg/ml, respectively.

### Description

Tafamidis is a kinetic stabilizer of transthyretin (TTR) that prevents amyloidogenesis by wild-type and mutant TTRs.<sup>1</sup> It binds to TTR with negative cooperativity ( $K_{d1} = 3$  nM;  $K_{d2} = 278$  nM) to stabilize the TTR dimer-dimer interface and inhibit tetrameric dissociation. Tafamidis stabilizes wild-type and clinically significant V30M and V122I mutant TTR amyloidogenic homotetramers ( $EC_{50s} = 2.7$ - $3.2$  μM) under fibril-promoting, denaturing, and physiological conditions *in vitro*. It stabilizes TTR heterotetramers containing wild-type and mutant subunits *ex vivo* in human plasma derived from patients carrying V30M or V122I mutations when used at a concentration of 7.2 μM. Formulations containing tafamidis have been used for the treatment of familial amyloid polyneuropathy.<sup>2</sup>

### References

1. Bulawa, C.E., Connelly, S., Devit, M., *et al.* Tafamidis, a potent and selective transthyretin kinetic stabilizer that inhibits the amyloid cascade. *Proc. Natl. Acad. Sci. USA* **109**(24), 9629-9634 (2012).
2. Scott, L.J. Tafamidis: A review of its use in familial amyloid polyneuropathy. *Drugs* **74**(12), 1371-1378 (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, 12/13/2022

#### 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