

# Hoechst 34580

## Catalog No: tcsc1303



### Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



### Specifications

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**CAS No:**  
23555-00-2

**Formula:**  
 $C_{27}H_{29}N_7$

**Pathway:**  
Neuronal Signaling

**Target:**  
Amyloid- $\beta$

**Purity / Grade:**  
>98%

**Solubility:**  
DMSO :  $\geq 47$  mg/mL (104.08 mM)

**Alternative Names:**  
HOE 34580

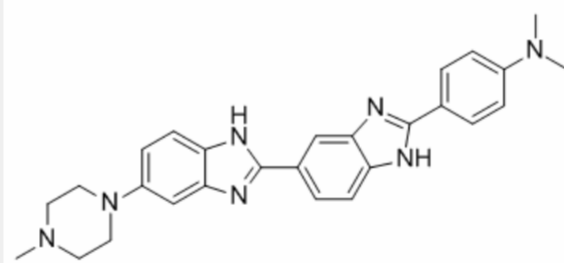
**Observed Molecular Weight:**  
451.57

## Product Description

Hoechst 34580 is a cell-permeable fluorescent dye for staining DNA and nuclei.

IC<sub>50</sub> & Target: Amyloid-β<sup>[1]</sup>

**In Vitro:** Hoechst 34580 prefers to locate near hydrophobic regions with binding affinity with the inhibition constant IC<sub>50</sub> of 0.86±0.05 μM for Hoechst 34580. Hoechst 34580 is a good candidate for treating the Alzheimer's disease by inhibiting Aβ formation. 50 μM Aβ<sub>42</sub> solutions co-incubated with 100, 25, 12.5, 3.125, 0.78, and 0.1, 0.01 μM Hoechst 34580 at 37 °C for 70 h. Hoechst 34580 can inhibit the aggregation of Aβ<sub>42</sub> in a dose-dependent manner. And the half-maximal concentration (IC<sub>50</sub>) is examined. The IC<sub>50</sub> is obtained by measuring the concentration of Hoechst 34580 while maintaining the Aβ<sub>42</sub> concentration which gave 0.86±0.05 μM for Hoechst 34580<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!