

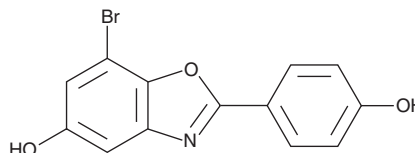
# PRODUCT INFORMATION



**WAY-200070**

Item No. 23323

**CAS Registry No.:** 440122-66-7  
**Formal Name:** 7-bromo-2-(4-hydroxyphenyl)-5-benzoxazolol  
**Synonym:** WAY-00005  
**MF:** C<sub>13</sub>H<sub>8</sub>BrNO<sub>3</sub>  
**FW:** 306.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 289, 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

WAY-200070 is supplied as a crystalline solid. A stock solution may be made by dissolving the WAY-200070 in the solvent of choice, which should be purged with an inert gas. WAY-200070 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of WAY-200070 in DMSO is approximately 20 mg/ml and approximately 33 mg/ml in ethanol and DMF.

WAY-200070 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, WAY-200070 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. WAY-200070 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

WAY-200070 is a potent and selective agonist of estrogen receptor β (ERβ; IC<sub>50</sub>s = 2 and 187 nM for human full-length ERβ and ERα, respectively).<sup>1</sup> WAY-200070 (30 mg/kg, s.c. in mice) induces nuclear translocation of ERβ and increases c-fos activation and dopamine levels in the striatum four hours after administration.<sup>2</sup> At the same dose, it decreases depressive-like behavior in the tail suspension test. It has anxiolytic effects in mice using the four-plate and stress-induced hyperthermia tests and in zebrafish larvae using a light-dark choice behavior test.<sup>2,3</sup> In addition, WAY-200070 improves glucose and insulin sensitivity in mouse models of diabetes.<sup>4</sup>

## References

1. Malamas, M.S., Manas, E.S., McDevitt, R.E., *et al.* Design and synthesis of aryl diphenolic azoles as potent and selective estrogen receptor-β ligands. *J. Med. Chem.* **47**(21), 5021-5040 (2004).
2. Hughes, Z.A., Liu, F., Platt, B.J., *et al.* WAY-200070, a selective agonist of estrogen receptor beta as a potential novel anxiolytic/antidepressant agent. *Neuropharmacology* **54**(7), 1136-1142 (2008).
3. Chen, F., Chen, S., Liu, S., *et al.* Effects of lorazepam and WAY-200070 in larval zebrafish light/dark choice test. *Neuropharmacology* **95**, 226-233 (2015).
4. Alonso-Magdalena, P., Ropero, A.B., García-Arévalo, M., *et al.* Antidiabetic actions of an estrogen receptor β selective agonist. *Diabetes* **62**(6), 2015-2025 (2013).

### 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, 11/15/2022

## 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