

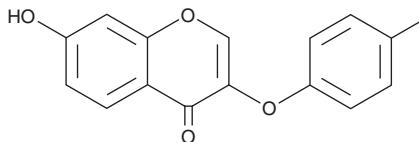
# PRODUCT INFORMATION



## XAP044

Item No. 19095

**CAS Registry No.:** 196928-50-4  
**Formal Name:** 7-hydroxy-3-(4-iodophenoxy)-4H-1-benzopyran-4-one  
**MF:** C<sub>15</sub>H<sub>9</sub>IO<sub>4</sub>  
**FW:** 380.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 236, 250, 299 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

XAP044 is supplied as a crystalline solid. A stock solution may be made by dissolving the XAP044 in the solvent of choice. XAP044 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of XAP044 in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

XAP044 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, XAP044 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. XAP044 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

XAP044 is an antagonist of the metabotropic glutamate (mGlu) receptor 7 (mGluR7), inhibiting lateral amygdala long term potentiation in brain slices from wild-type mice with an IC<sub>50</sub> value of 88 nM.<sup>1</sup> This effect is absent in mGluR7-deficient mice. XAP044 demonstrates good brain penetrance, producing wide spectrum anti-stress and antidepressant- and anxiolytic-like efficacy in rodent behavioral tests.<sup>1</sup>

### Reference

1. Gee, C.E., Peterlik, D., Neuhäuser, C., *et al.* Blocking metabotropic glutamate receptor subtype 7 (mGlu7) via the Venus flytrap domain (VFTD) inhibits amygdala plasticity, stress, and anxiety-related behavior. *J. Biol. Chem.* **289**(16), 10975-10987 (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