

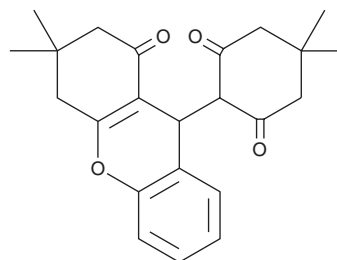
# PRODUCT INFORMATION



**L-152,804**

Item No. 42504

**CAS Registry No.:** 6508-43-6  
**Formal Name:** 5,5-dimethyl-2-(2,3,4,9-tetrahydro-3,3-dimethyl-1-oxo-1H-xanthen-9-yl)-1,3-cyclohexanedione  
**MF:** C<sub>23</sub>H<sub>26</sub>O<sub>4</sub>  
**FW:** 366.5  
**Purity:** ≥98%  
**Supplied as:** A 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

L-152,804 is supplied as a solid. A stock solution may be made by dissolving the L-152,804 in the solvent of choice, which should be purged with an inert gas. L-152,804 is slightly soluble (0.1-1 mg/ml) in DMSO and ethanol.

## Description

L-152,804 is an antagonist of neuropeptide Y (NPY) receptor Y<sub>5</sub> (IC<sub>50</sub>s = 26 and 31 nM for the human and rat receptors, respectively).<sup>1</sup> It is selective for Y<sub>5</sub> over Y<sub>1</sub>, Y<sub>2</sub>, and Y<sub>4</sub> receptors (IC<sub>50</sub>s = >10,000 nM for the human receptors). L-152,804 (30 µg, i.c.v.) reduces bovine pancreatic peptide-induced, but not NPY-induced, food intake in satiated rats. It reduces body weight in diet-induced obese (DIO) mice to a greater extent than pair-fed DIO mice without reducing food intake when administered at a dose of 100 mg/kg.<sup>2</sup> It also reduces mesenteric adipose tissue weight in DIO mice when compared to pair-fed DIO or *ad libitum*-fed DIO mice and reduces hepatic triglyceride levels in DIO mice when compared to *ad libitum*-fed DIO mice. L-152,804 increases expression of the genes encoding mitochondrial uncoupling protein 1 (UCP1) and UCP3 in brown adipose tissue (BAT) and the β<sub>3</sub>-adrenergic receptor in white adipose tissue (WAT) of DIO mice compared to pair-fed and *ad libitum*-fed DIO mice. It does not increase energy expenditure in DIO mice compared to lean mice.

## References

1. Kanatani, A., Ishihara, A., Iwaasa, H., *et al.* L-152,804: Orally active and selective neuropeptide Y Y5 receptor antagonist. *Biochem. Biophys. Res. Commun.* **272**(1), 169-173 (2000).
2. Mashiko, S., Ishihara, A., Iwaasa, H., *et al.* A pair-feeding study reveals that a Y5 antagonist causes weight loss in diet-induced obese mice by modulating food intake and energy expenditure. *Mol. Pharmacol.* **71**(2), 602-608 (2007).

### 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, 01/20/2025

## 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](http://WWW.CAYMANCHEM.COM)