

# PRODUCT INFORMATION



## Fexaramine

Item No. 17369

CAS Registry No.: 574013-66-4

Formal Name: 3-[3-[(cyclohexylcarbonyl) [[4'-(dimethylamino)[1,1'-biphenyl]-4-yl]methyl]amino]phenyl]-2-propenoic acid, methyl ester

MF:  $C_{32}H_{36}N_2O_3$

FW: 496.6

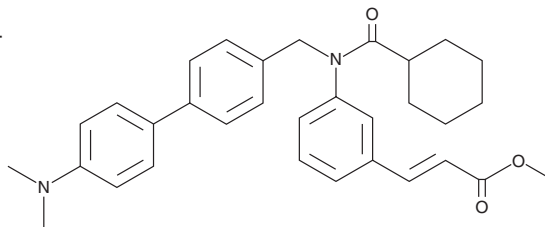
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 286 nm

Supplied as: A crystalline solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Fexaramine is supplied as a crystalline solid. A stock solution may be made by dissolving the fexaramine in the solvent of choice. Fexaramine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of fexaramine in DMSO is approximately 10 mg/ml and approximately 30 mg/ml in DMF.

Fexaramine is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

The farnesoid X receptor (FXR) is a nuclear receptor that acts as a bile acid sensor, protecting cells and organs against bile acid toxicity and coordinating cholesterol metabolism, lipid homeostasis, and absorption of dietary fats and vitamins. Fexaramine is an FXR agonist ( $EC_{50} = 25$  nM) that demonstrates 100-fold increased affinity to FXR compared to endogenous bile acids and 3-fold increased potency compared to the high affinity FXR agonist GW 4064 (Item No. 10006611;  $EC_{50} = 80$  nM).<sup>1</sup> Fexaramine does not display activity at the following nuclear receptors: hRXR $\alpha$ , hPPAR $\alpha$  $\gamma$  $\delta$ , mPXR, hPXR, hLXR $\alpha$ , hTR $\beta$ , hRAR $\beta$ , mCAR, mERR $\gamma$ , or hVDR.<sup>1</sup>

### Reference

1. Downes, M., Verdecia, M.A., Roecker, A.J., *et al.* A chemical, genetic, and structural analysis of the nuclear bile acid receptor FXR. *Mol. Cell* **11**(4), 1079-1092 (2003).

#### 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

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