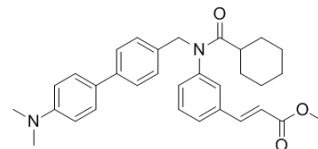


## Data Sheet

<b>Product Name:</b>	Fexaramine
<b>Cat. No.:</b>	HY-10912
<b>CAS No.:</b>	574013-66-4
<b>Molecular Formula:</b>	C <sub>32</sub> H <sub>36</sub> N <sub>2</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	496.64
<b>Target:</b>	FXR
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Solubility:</b>	10 mM in DMSO



### BIOLOGICAL ACTIVITY:

Fexaramine is a small molecule farnesoid X receptor (FXR) agonist with 100-fold increased affinity relative to natural compounds. IC50 value:

Target:

in vitro: In vitro treatment of CDCA or fexaramine elevated the SHP transcript level and occupancy on secretin promoter [1].

Fexaramine significantly enhanced osteoblastic differentiation through the upregulation of Runx2 and enhanced extracellular signal-regulated kinase (ERK) and  $\beta$ -catenin signaling [2]. By mimicking this tissue-selective effect, the gut-restricted FXR agonist fexaramine (Fex) robustly induces enteric fibroblast growth factor 15 (FGF15), leading to alterations in BA composition, but does so without activating FXR target genes in the liver [3].

### References:

- [1]. Lam IP, et al. Bile acids inhibit duodenal secretin expression via orphan nuclear receptor small heterodimer partner (SHP). *Am J Physiol Gastrointest Liver Physiol.* 2009 Jul;297(1):G90-7.
- [2]. Cho SW, et al. Positive regulation of osteogenesis by bile acid through FXR. *J Bone Miner Res.* 2013 Oct;28(10):2109-21.
- [3]. Fang S, et al. Intestinal FXR agonism promotes adipose tissue browning and reduces obesity and insulin resistance. *Nat Med.* 2015 Feb;21(2):159-65.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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