

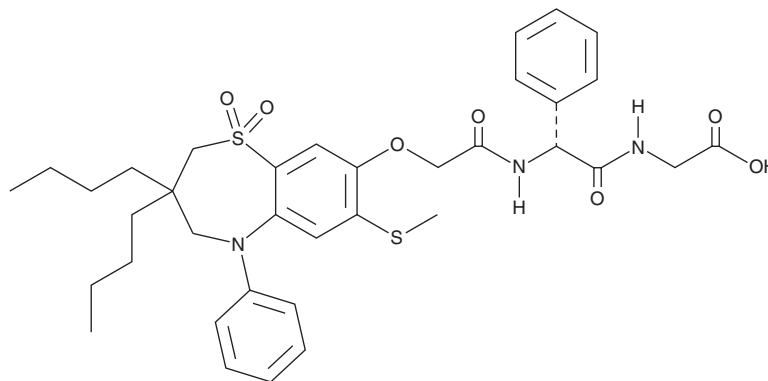
# PRODUCT INFORMATION



## Elobixibat

Item No. 30658

**CAS Registry No.:** 439087-18-0  
**Formal Name:** (2R)-N-[2-[[[3,3-dibutyl-2,3,4,5-tetrahydro-7-(methylthio)-1,1-dioxido-5-phenyl-1,5-benzothiazepin-8-yl]oxy]acetyl]-2-phenylglycyl-glycine  
**Synonyms:** A3309, AZD 7806  
**MF:** C<sub>36</sub>H<sub>45</sub>N<sub>3</sub>O<sub>7</sub>S<sub>2</sub>  
**FW:** 695.9  
**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

Elobixibat is supplied as a solid. A stock solution may be made by dissolving the elobixibat in the solvent of choice, which should be purged with an inert gas. Elobixibat is soluble in methanol and is sparingly soluble (1-10 mg/ml) in DMSO.

### Description

Elobixibat is an inhibitor of the sodium/bile acid and sulfated solute cotransporter (ASBT), also known as the ileal bile acid transporter (IBAT; IC<sub>50</sub>s = 0.53, 0.13, and 5.8 nM for the human, mouse, and canine transporters, respectively).<sup>1</sup> It is selective for ASBT over the hepatic sodium/bile acid cotransporter (IC<sub>50</sub> = 240 nM). Elobixibat induces mild giant migrating contractions in the colon and increases the number of defecations in conscious dogs two hours after administration of 3, 10, or 30 mg/kg doses, as well as increases the number of defecations after ten hours at 30 mg/kg.<sup>2</sup> Oral administration of elobixibat (1.2 mg/kg per day) reduces methionine- and choline-deficient diet-induced increases in serum bile acid levels and hepatic inflammation, fibrosis, and cytokine gene expression in a mouse model of non-alcoholic steatohepatitis (NASH).<sup>3</sup> Formulations containing elobixibat have been used in the treatment of chronic constipation.

### References

1. Gillberg, P.-G., Dahlström, M., Starke, I., *et al.* The IBAT inhibition by A3309 - a potential mechanism for the treatment of constipation. *Gastroenterol.* **138**(5 suppl. 1), S-224 (2010).
2. Taniguchi, S., Yano, T., Imaizumi, M., *et al.* Elobixibat, an ileal bile acid transporter inhibitor, induces giant migrating contractions during natural defecation in conscious dogs. *Neurogastroenterol. Motil.* **30**(12), e13448 (2018).
3. Yamauchi, R., Takedatsu, H., Yokoyama, K., *et al.* Elobixibat, an ileal bile acid transporter inhibitor, ameliorates non-alcoholic steatohepatitis in mice. *Hepatol. Int.* **15**(2), 392-404 (2021).

#### 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, 04/29/2024

#### 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)