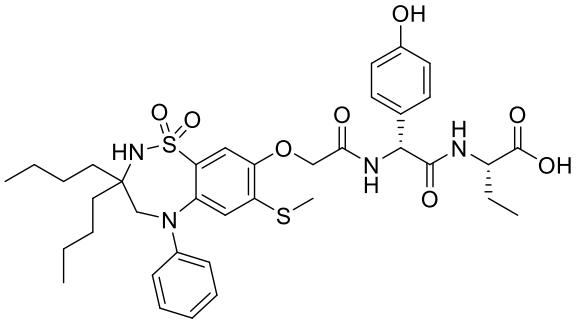
Product data sheet

MedKoo Cat#: 529210 Name: Odevixibat CAS#: 501692-44-0 (free base) Chemical Formula: $C_{37}H_{48}N_4O_8S_2$ Exact Mass: 740.2914 Molecular Weight: 740.93	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
Odevixibat, also known as A-4250 and AZD 8294, is an ileal bile acid transporter (IBAT) inhibitor potentially for the treatment of primary biliary cirrhosis

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	250.0	337.41

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.35 mL	6.75 mL	13.50 mL
5 mM	0.27 mL	1.35 mL	2.70 mL
10 mM	0.13 mL	0.67 mL	1.35 mL
50 mM	0.03 mL	0.13 mL	0.27 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

TBD

In vivo study

1. Baghdasaryan A, Fuchs CD, Österreicher CH, Lemberger UJ, Halilbasic E, Påhlman I, Graffner H, Krones E, Fickert P, Wahlström A, Ståhlman M, Paumgartner G, Marschall HU, Trauner M. Inhibition of intestinal bile acid absorption improves cholestatic liver and bile duct injury in a mouse model of sclerosing cholangitis. J Hepatol. 2016 Mar;64(3):674-81. doi: 10.1016/j.jhep.2015.10.024. Epub 2015 Oct 31. PMID: 26529078.

7. Bioactivity
Biological target:

Odevixibat (A4250) is a potent and selective inhibitor of the ileal bile acid transporter (IBAT).

In vitro activity

TBD

Product data sheet

In vivo activity

Eight week old Mdr2(-/-) (Abcb4(-/-)) mice (model of cholestatic liver injury and sclerosing cholangitis) received either a diet supplemented with A4250 (0.01% w/w) - a highly potent and selective ASBT inhibitor - or a chow diet. A4250 improved sclerosing cholangitis in Mdr2(-/-) mice and significantly reduced serum alanine aminotransferase, alkaline phosphatase and BAs levels, hepatic expression of pro-inflammatory (Tnf-α, Vcam1, Mcp-1) and pro-fibrogenic (Col1a1, Col1a2) genes and bile duct proliferation (mRNA and immunohistochemistry for cytokeratin 19 (CK19)). Furthermore, A4250 significantly reduced bile flow and biliary BA output, which correlated with reduced Bsep transcription, while Ntcp and Cyp7a1 were induced. Importantly A4250 significantly reduced biliary BA secretion but preserved HCO3(-) and biliary phospholipid secretion resulting in an increased HCO3(-)/BA and PL/BA ratio. In addition, A4250 profoundly increased fecal BA excretion without causing diarrhea and altered BA pool composition, resulting in diminished concentrations of primary BAs tauro-β-muricholic acid and taurocholic acid. In conclusion, pharmacological ASBT inhibition attenuates cholestatic liver and bile duct injury by reducing biliary BA concentrations in mice.

Reference: J Hepatol. 2016 Mar;64(3):674-81.https://pubmed.ncbi.nlm.nih.gov/26529078/