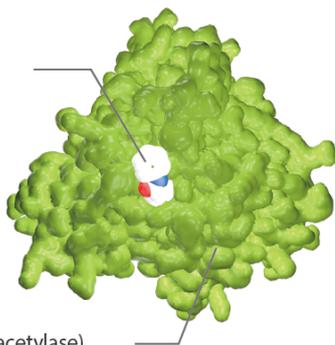


URAT1

Urate transporter 1;SLC22A12

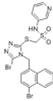
HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

URAT1, a member of the OAT (organic anion transporter) family was first cloned from the human kidney, where it is localized to the apical (brush border) membrane of renal proximal tubular cells. URAT1 mediates the reabsorption of uric acid, thereby regulating blood uric acid concentrations. Impairment in URAT1 activity, either due to polymorphisms, or drug-drug interactions, can have toxicological consequences. In the kidney, URAT1 is distributed along the renal tubular cell membrane and involved in reabsorption and excretion of uric acid, organic acids, drugs and their metabolites. Uric acid is taken up by OAT1 and OAT3 from the blood and reabsorbed into renal tubular cells via URAT1, in exchange for dicarboxylic acid. URAT1, along with OAT4 mediates uptake of uric acid from the renal tubule into renal tubular cells in exchange for organic anions such as lactic acid and nicotinic acid. This exchange is electroneutral and can be trans-stimulated by Cl^- gradients and gradients of lactate transported by the sodium-monocarboxylate transporter. In the salivary glands, URAT1 is distributed along the entire surface, including the ductal and acinar cells, suggesting a role in the transport of organic acids and uric acid in the whole salivary gland.

URAT1 Inhibitors & Modulators

Lesinurad (RDEA594)	Cat. No.: HY-15258	Lesinurad sodium (RDEA-594 sodium)	Cat. No.: HY-15258A
Bioactivity: Lesinurad is a URAT1 and OAT inhibitor, is determined to be a substrate for the kidney transporters OAT1 and OAT3 with K_m values of 0.85 and 2 μ M, respectively.		Bioactivity: Lesinurad sodium is a URAT1 and OAT inhibitor, is determined to be a substrate for the kidney transporters OAT1 and OAT3 with K_m values of 0.85 and 2 μ M, respectively.	
Purity: 99.96%		Purity: 99.92%	
Clinical Data: Launched		Clinical Data: Launched	
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg		Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg	
URAT1 inhibitor 1	Cat. No.: HY-114309	Verinurad (RDEA3170)	Cat. No.: HY-16733
Bioactivity: URAT1 inhibitor 1 (1g) is a uric acid transporter 1 (URAT1) inhibitor, with an IC₅₀ of 32 nM. URAT1 inhibitor 1 has potential to treat hyperuricemia associated with gout ^[1] .		Bioactivity: Verinurad (RDEA3170) is a highly potent and specific URAT1 inhibitor with an IC₅₀ of 25 nM ^[1] .	
Purity: >98%		Purity: 98.0%	
Clinical Data: No Development Reported		Clinical Data: No Development Reported	
Size: 250 mg, 500 mg, 100 mg		Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg	