

Product Name: D-Penicillamine

Product Number: P107

CAS Number: 52-67-5

Molecular Formula: $C_5H_{11}NO_2S$

Molecular Weight: 149.21

Description: D-Penicillamine is a copper chelating agent that also functions as a disease-modifying, anti-rheumatic immunosuppressant, and a treatment for cystinuria.

TOKU-E offers both D-penicillamine (P107) and L-penicillamine (P112). While they are enantiomers of each other with equal copper chelating ability, L-penicillamine has a high toxicity in humans.

Mechanism of Action: D-Penicillamine treats cystinuria by disulfide exchange between D-penicillamine and cystine, the product of penicillamine-cysteine disulfide being much more soluble than cystine.

References: Purkiss, P., & Watts, R. W. (1977). Low Dose D-penicillamine in Cystinuria. *Proceedings of the Royal Society of Medicine*, 70(3), 27-30. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1543600/>