



# Plant-Based Environmental-Friendly **Organocatalyst for Asymmetric** Ring-Opening Reaction of Epoxides



**D-Galactan** [for Plant-based Organic Molecular Catalyst] 1g / 5g

## Advantages

- Metal-free organocatalyst composed of polysaccharide D-galactan derived from plants
- · Suitable for the development of safe and environmentally friendly processes in line
- · Applicable to the synthesis of enantioenriched β-amino alcohols, important intermediates for medicinal chemistry

Application: Asymmetric ring-opening reaction of epoxides by addition of amines



Enantioenriched β-amino alcohols obtained from this reactions are important intermediates for biologically active compounds and drug.3)

Enantiomerically pure compounds can be obtained by recrystallization of reaction products. 1,2)

References 1) Y. Takeuchi, T. Asano, K. Tsuzaki, K. Wada, Bull. Chem. Soc. Jpn. 2018, 91, 678. https://doi.org/10.1246/bcsj.20170369 2) Y. Takeuchi, T. Asano, K. Tsuzaki, K. Wada, H. Kurata, Molecules 2020, 25, 3197. https://doi.org/10.3390/molecules25143197 3) Y. Koga, H. Hidaka, et al., Bioorg. Med. Chem. Lett. 1998, 8, 1471. https://doi.org/10.1016/S0960-894X(98)00246-7

This product is commercialized by receiving the research results material based on the joint intellectual property of Toyama Prefectural University and Kyowa Pharma Chemical Co., Ltd., (WO2023/191088).

#### **Related Products**

1,2-Epoxycyclohexane Cyclopropylamine

25mL / 100mL / 500mL [O0071] 5mL / 25mL [C0981]

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