Resolution of 1,3-dioxolane derivatives by transesterification by the lipase from *Acinetobacter junii* SY-01

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Screening a strain was carried out to produce a lipase enantioslectively hydrolyzing toward 1,3-dioxolane derivatives, which is well known as the starting material of anti-fungal drug agents such as itraconazole and ketoconazole[1,2,3]. The strain no. 26 was isolated from water sludge samples and was identified a species belong to *Acinetobacter junii*, and was named as *Acinetobacter junii* SY-01. The lipase from *Acinetobacter junii* SY-01 showed better enantioselectivity compared to those of commercially available lipases and esterase. At transesterification reaction toward 1,3-dioxolane derivatives using the lipase from *Acinetobacter junii* SY-01, resolving efficiency was most high at the condition using acetonitrile, 5mM of 1,3-dioxolane derivatives, 500mM of vinyl acetate. At application of secondary alcohol by transesterification, 2-hexanol and 1-phenyl-2-propanol was most highly resolved.

References

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