

## Electronic Supplementary Information 2

### **Efficient Enzyme-catalyzed Production of Diosgenin: Inspired by the Revelation of Biotransformation Mechanisms of Steroid Saponins by *Talaromyces Stollii* CLY-6**

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A total of **867** genes in *Talaromyces Stollii* CLY-6 were classified as carbohydrate-active enzymes (CAZy), and the detailed amino acid sequences were shown as follows:

>2899\_t gene=2899\_g

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>2921\_t gene=2921\_g

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VAASSIADAPECESLEFNDNVDA YRQFAGGVNMAQARIMSSETGAHYGQSYSLTWPTL  
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TTFEWDGSATDGAILATGPIFHTQAATLNGRALDPFELFDPWIDITENLEIGTNELEIQIAT  
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>2938\_t gene=2938\_g

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VVADVSYDIFTSPYGGPDSYEIMIWL GALGGAGPISSTGSPVATVNIAGAKWKLYKGNP  
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>2939\_t gene=2939\_g

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TSNFS

>2972\_t gene=2972\_g

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GRIAYFYASRMMAAGQEDSTEIIGTKGKLTVNTQPQINLVNIYEADGVRRELPHYFDRF  
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AL

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AFVLWNGSVVLGHKEFHITAGIHLPMQMLYIWPYFVFFSPLISIGVLNAVPPRRFIPKYLDY  
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>3105\_t gene=3105\_g

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NAAVMKHCFRGLIDGPDSPPEERSQHTQVFAVLCGALKGETARTVLRHALTNSSFVR  
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>3135\_t gene=3135\_g

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DKIFFVGLTIVGLGIGAYIISGWASVENPPYCLVFEDDFLNGINENDWNYEIQLGGYGV  
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>1997\_t gene=1997\_g

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>2011\_t gene=2011\_g

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>2012\_t gene=2012\_g

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