

## UDP-4- Keto-6-Deoxy-D-Glucose 3, 5-Epimerase/4-Reductase (ApmUGER)

### Product Information

|                                 |                                                                                                                                                                                                                                                                                                  |
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| <b>Cat#</b>                     | DIA-890                                                                                                                                                                                                                                                                                          |
| <b>Descriptions</b>             | UDP-4- keto-6-deoxy-D-glucose 3, 5-epimerase/4-reductase (ApmUGER) is a bifunctional enzyme that sequentially performs epimerization and reduction reactions to convert UDP-4-keto-6-deoxyglucose into UDP-rhamnose, is a core biocatalyst for dTDP-L-rhamnose and related deoxysugar synthesis. |
| <b>Applications</b>             | UDP-4- keto-6-deoxy-D-glucose 3, 5-epimerase/4-reductase (ApmUGER) serves as a bifunctional biocatalyst for UDP-rhamnose synthesis detection kits and deoxysugar preparation assay reagent development.                                                                                          |
| <b>CAS No.</b>                  | 42-1-76                                                                                                                                                                                                                                                                                          |
| <b>Enzyme Commission Number</b> | EC 4.2.1.76                                                                                                                                                                                                                                                                                      |
| <b>Enzyme Source</b>            | E.coli recombinant ApmUGD from Arabidopsis thaliana.                                                                                                                                                                                                                                             |
| <b>Reaction</b>                 | UDP-4-Keto-6-deoxy-D-glucose+NADPH=UDP-L-rhamnose+NADP+                                                                                                                                                                                                                                          |
| <b>Activity Definition</b>      | One unit is defined as the amount of enzyme that catalyzes the formation of 1 $\mu$ mol of UDP-L-rhamnose from UDP-4-Keto-6-deoxy-D-glucose at 37°C.                                                                                                                                             |