What is claimed is:

1. An enzymatic process for preparing tagatose, the process comprising the steps of:

(i) converting fructose 6-phosphate (F6P) to tagatose 6-phosphate (T6P) catalyzed by a fructose 6-phosphate epimerase (F6PE); and

(II) converting the T6P produced to tagatose catalyzed by a tagatose 6-phosphate phosphatase (T6PP);

wherein steps (i)-(ii) are conducted in a single reaction vessel.

2. The process of claim 1, wherein the F6PE comprises an amino acid sequence as set forth in any one of SEQ ID NOS.: 2, 4, 6, 8, or 11.

3. The process of claim 1, wherein the T6PP comprises an amino acid sequence as set forth in any one of SEQ ID NOS.: 13, 15, or 17.

4. The process of claim 2, wherein the T6PP comprises an amino acid sequence as set forth in any one of SEQ ID NOS.: 13, 15, or 17.