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Supporting information for article:

Expression, purification, crystallization and preliminary X-ray crystallographic analysis of fructose-1,6- bisphosphate aldolase from *Escherichia coli*

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S1. The optimal pH and kinetic parameters of *Ec*-FBPA I

The optimal pH for *Ec*-FBPA I was determined at 330.5 K in the solutions containing 100 *mM* of Tris-HCl (pH 7.0–9.0). The kinetic parameters, V_{max} and K_m, for *Ec*-FBPA I was measured at pH 8.75 (330.5 K) over a substrate concentration range from 62.5 to 167μM, with 0.78 μg of wild-type enzyme and by fitting the data to the Michaelis-Menten equation. One unit (U) of aldolase activity is defined as 1μM of FBP cleaved per min at at 330.5 K pH 8.75.

S2. Results

The result of optimum experiment shows that this enzyme can have over 90% of the maximal activity (Fig.S1) in a range of pH from 7.75 to 9.0. In this range, the Ec-FBPA I could show maximum activities at pH 8.75. The apparent K_m value of the *Ec*-FBPA I was 0.55 mM, V_{max} was 6.06 u/mg, and the turnover number is 231.

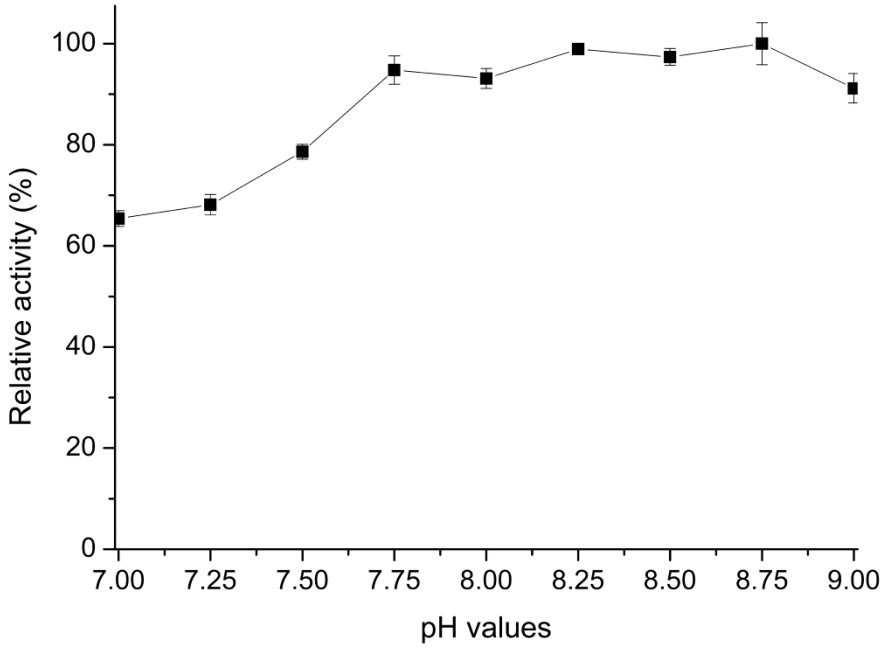

Figure S1 The optimal reaction pH of the *Ec*-FBPA I. All data were average values of triplicate independent experiments. The highest activities were defined as 100%.