

(E)

(F)

(D)

(C)

(B)

(A)

Figure S2 The knockout and confirmation of the *ILV5* gene. (A) Construction of fusion frames used for gene deletion; (B) The schematics of gene knockouts; (C) Purified PCR fragments used for *ILV5* deletion; (D) Enrichment result of *ILV5* mutants on LM; (E) Confirmation of the auxotrophic mutants on SM-A and SM-ABP plates; (F) Colony PCR of the DA-2 positive clones. Lane M, 10 kb DNA Marker; Lane 1, *ILV5* knockout frame; Lane 2, *ILV5* left arm; Lane 3, *ILV5* right arm; Lane 4-5, strain DA-2; Lane 6, control stain DA-1.