

**Table S3 Higher alcohols production by the original and recombinant strains.**

strains	n-propanol (mg/L)	Isobutanol (mg/L)	Isoamylol (mg/L)	Higher alcohols (mg/L)
XF0	124±10	226±4	575±10	924±7
XF0-h	59±6	271±15	374±5	704±7
XF0-H	41±3	235±5	409±3	685±5
XF0-L	109±9	167±7	554±12	813±24
XF0-LH	41±1	365±17	273±2	685±15