

Engineering of Fatty Acid Synthases (FASs) to Boost the Production of Medium-Chain Fatty Acids (MCFAs) in *Mucor circinelloides*

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Table S1 Primers for gene cloning

TE-01-F	ACTTTTATATACAAAATAACTAAATCTCGAGATGAAGTTCAAGAAGAAG
TE-01-R	ACTAGTCGCAATTGCCGCGGCTCGAGTTATTAGACGTTGGTCTTG
TE-02-F	ACTTTTATATACAAAATAACTAAATCTCGAGATGGTCGCTGCTGCTGCTTCTT
TE-02-R	ACTAGTCGCAATTGCCGCGGCTCGAGTTATTAGGTCTTACCGGTGAAAT
TE-03-F	ACTTTTATATACAAAATAACTAAATCTCGAGATGGGTAAAGCTTACGAA
TE-03-R	ACTAGTCGCAATTGCCGCGGCTCGAGTTATTAGTACCAGTAGGTCTCAG
TE-04-F	ACTTTTATATACAAAATAACTAAATCTCGAGATGGCTACCACCTCTTTGGC
TE-04-R	ACTAGTCGCAATTGCCGCGGCTCGAGTTATTAGACACGAGGCTCA
C-F	GAAGGCTTTACTGTTCCCTATCA
C-R	TTCATTTTTCCCTGTCTGC

Table S2 Primers for gene confirmation

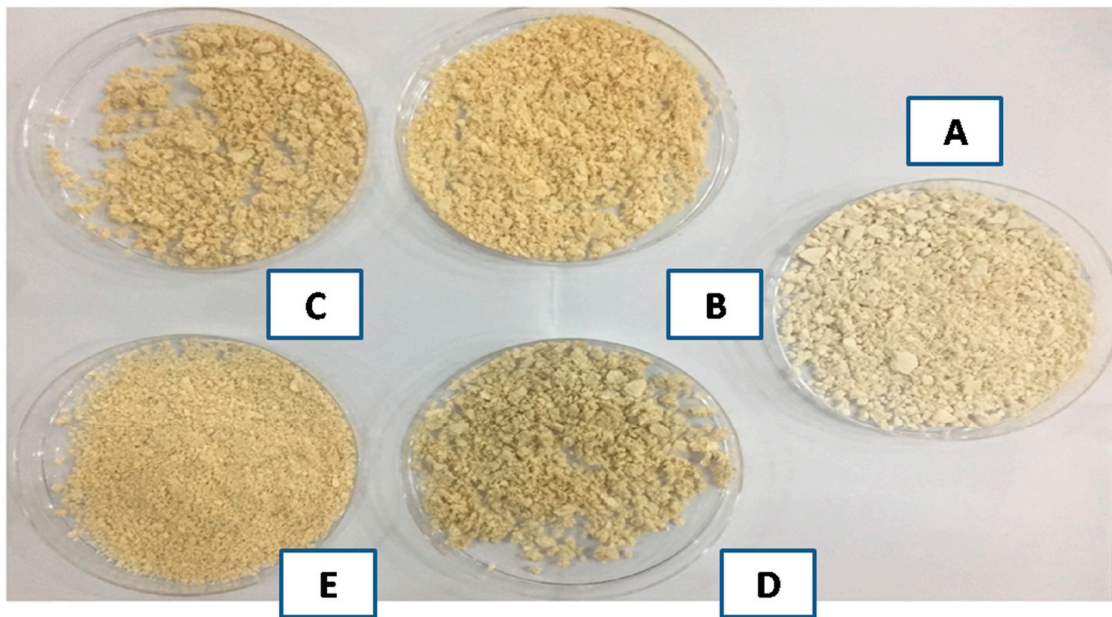
pMAT1552-F	GAAGGCTTTACTGTTCCCTATCA
pMAT1552-R	GACAGCAAGTGAGGAGAGGAACAGC

Table S3 Primers for RT-qPCR analysis

RT-1F	ATACCTGGTCGCTCTCATGAAC
RT-1R	CCTCGTGACTCAACGATAAAGT

RT-2F	ACTGGTCTTCCTCTCTCTCC
RT-2R	GGGAGGAGGACAAAGTATCTTC
RT-3F	CCGATAATTCTTCTGAGACCAC
RT-3R	GTCCATATCGTAGGCTTCAAAC
RT-4F	GCTAAGTCTGTCGGTATCTTGG
RT-4R	ATACCGTTGTTACCAGAAGCAC

Figure S1. (A-E) Color variation among dried mycelia of engineered, and control strain. (A) Control strain, (B) M65-TE-01, (C) M65-TE-02, (D) M65-TE-03, (E) M65-TE-04 strain.



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Note: Syed Ammar Hussain & Ahsan Hameed will be considered equally first authors for this manuscript.