

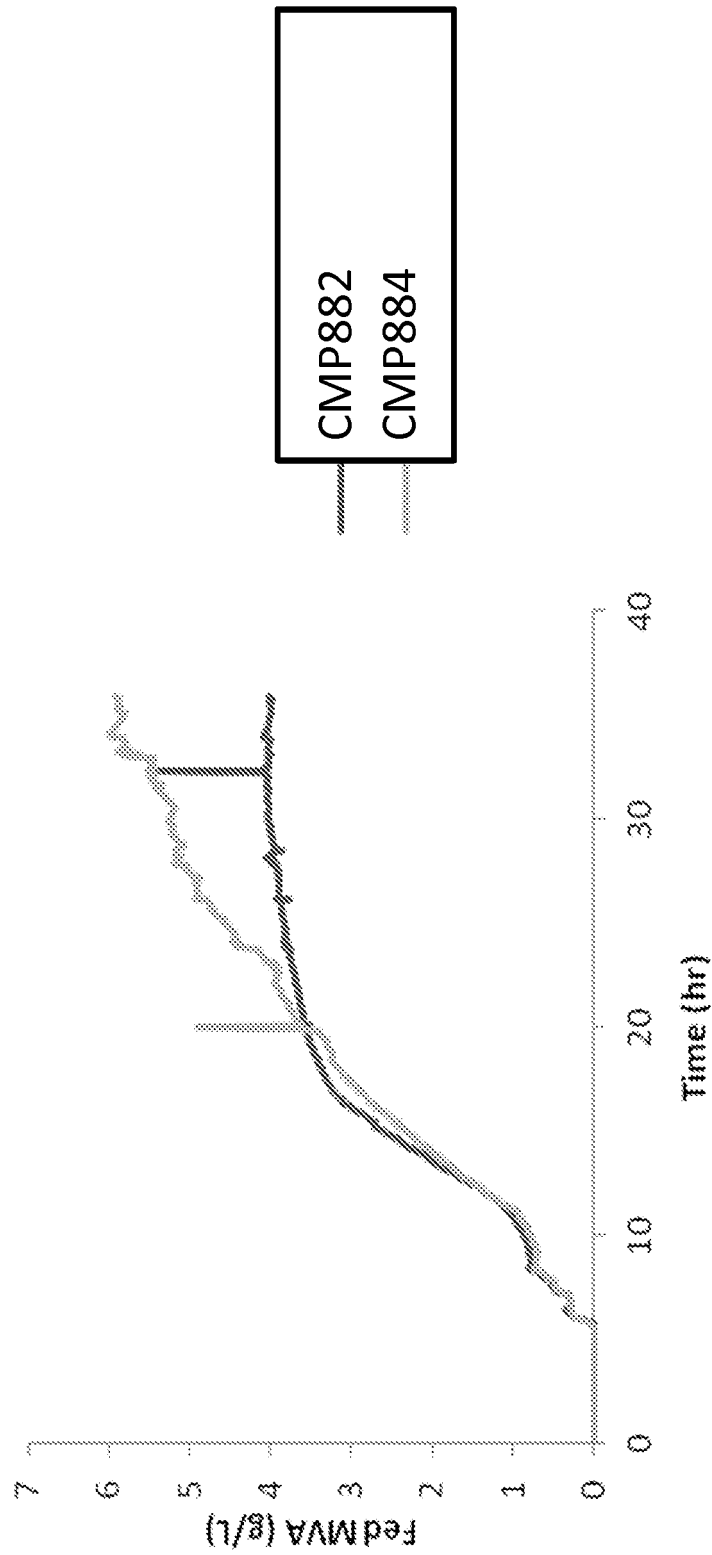


Figure 1a

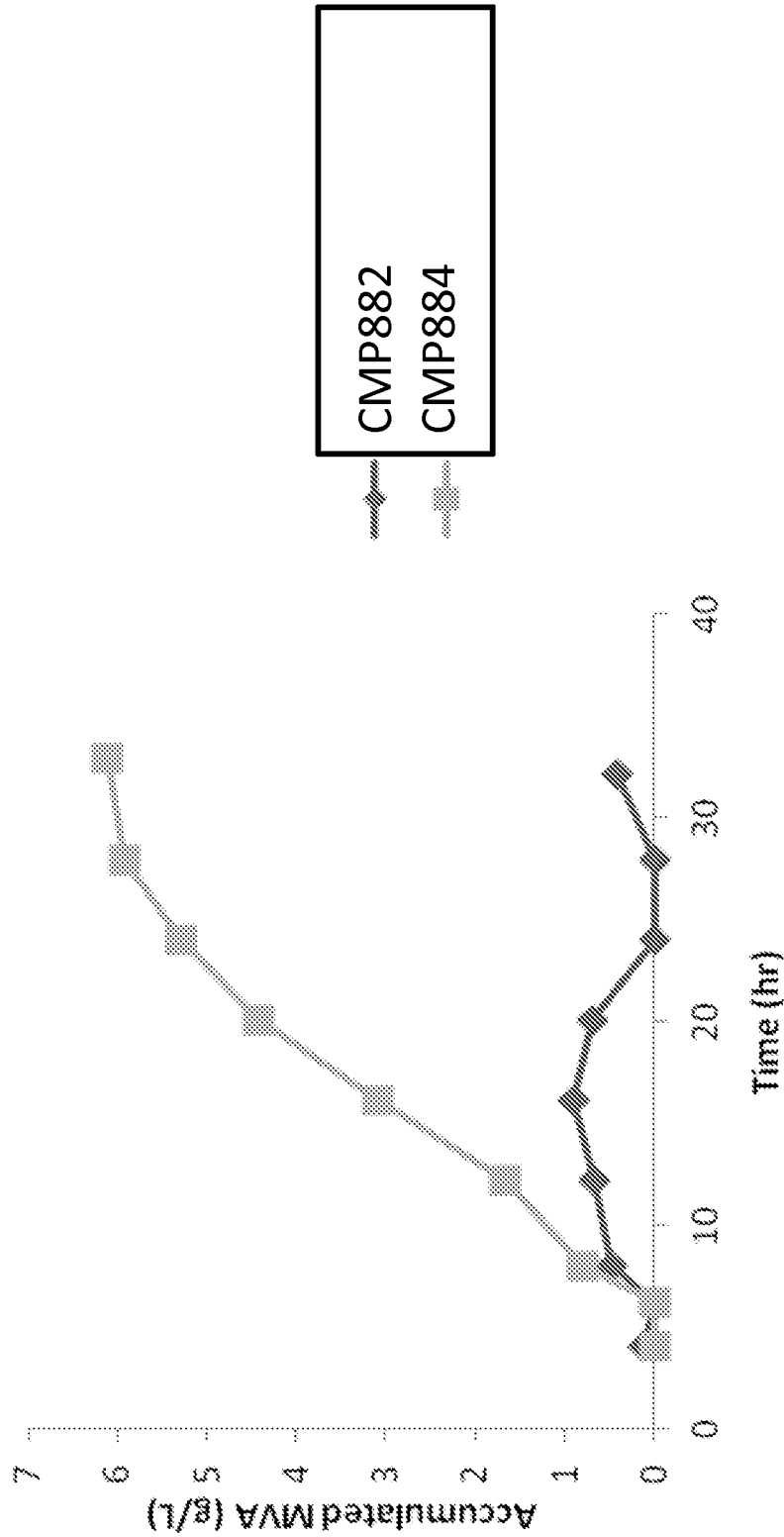


Figure 1b

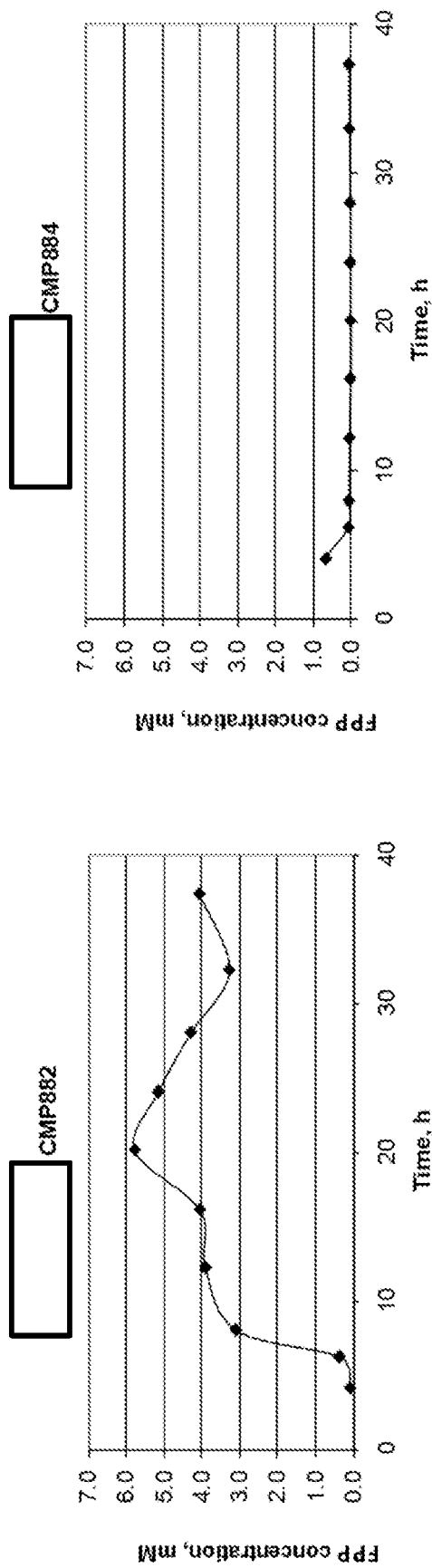


Figure 2

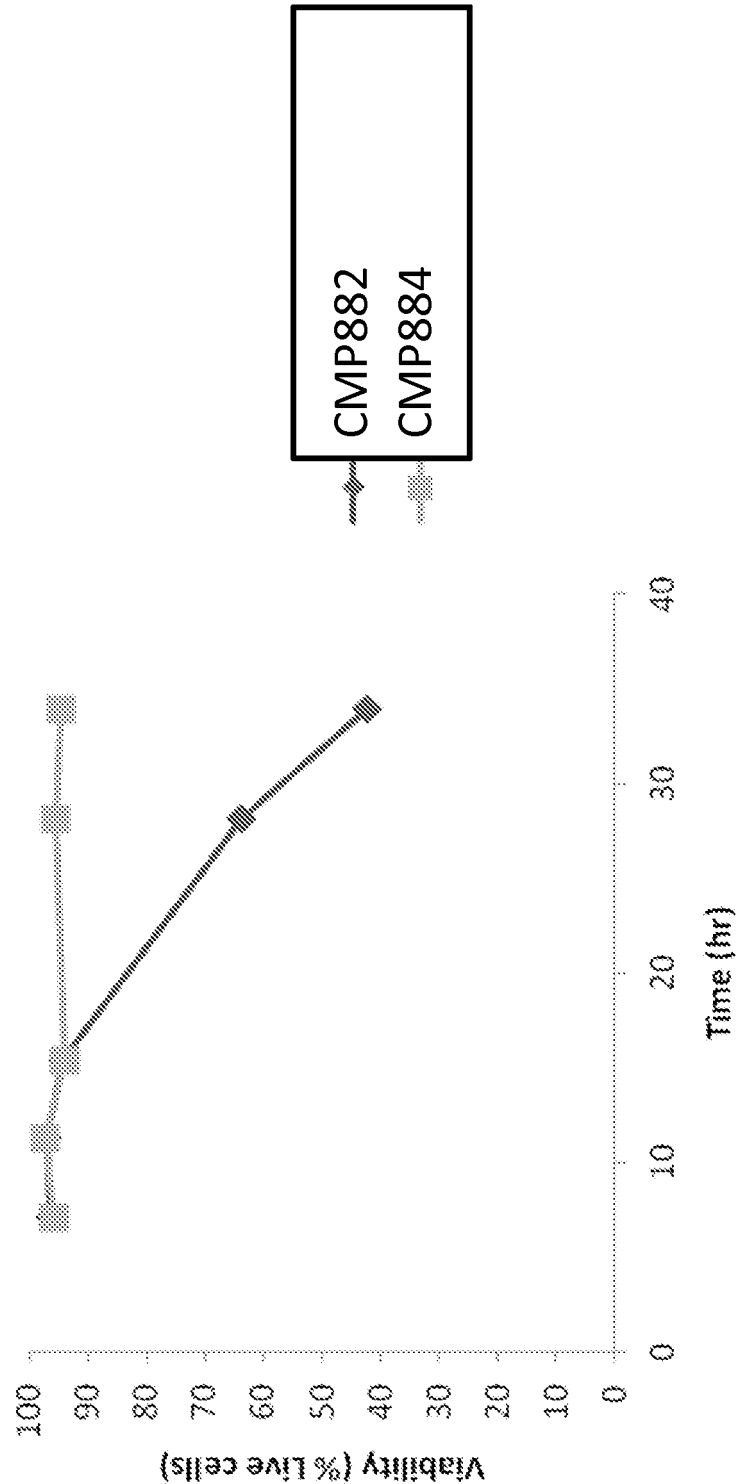


Figure 3

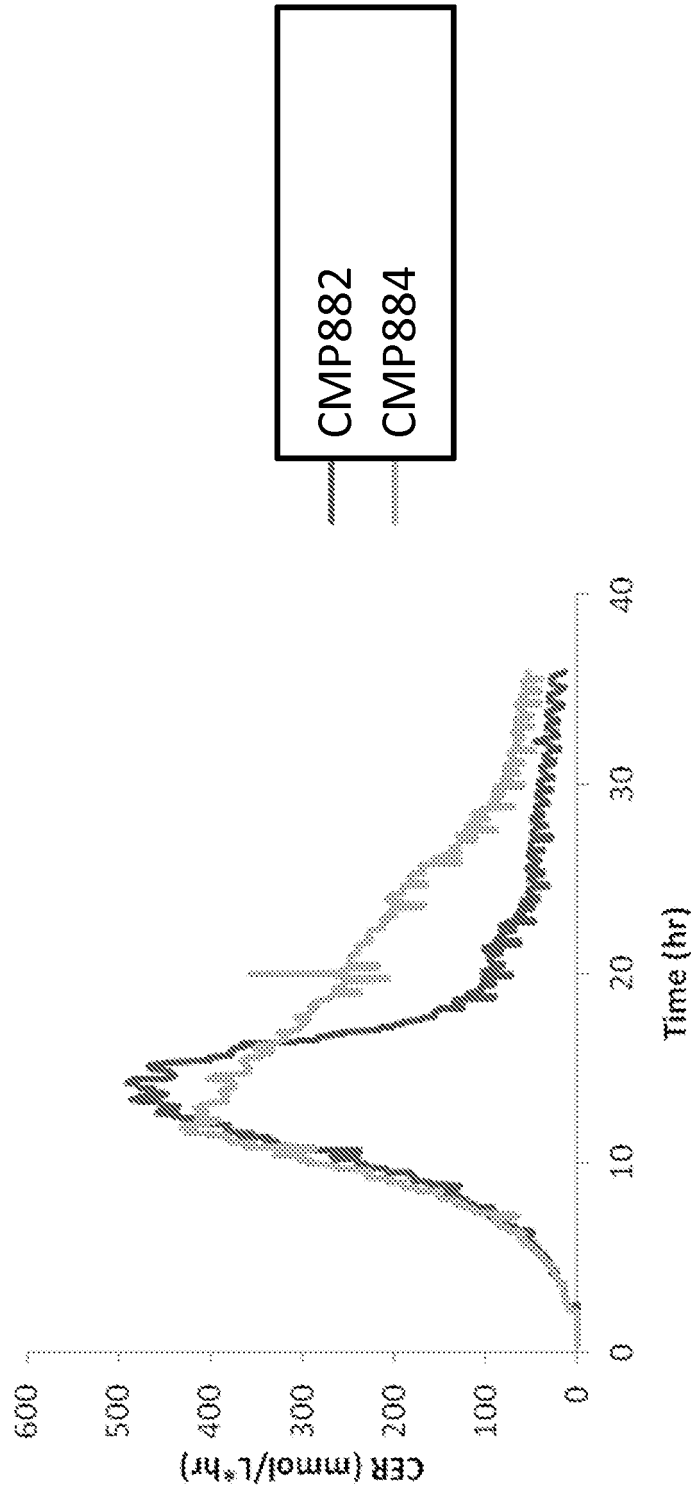


Figure 4

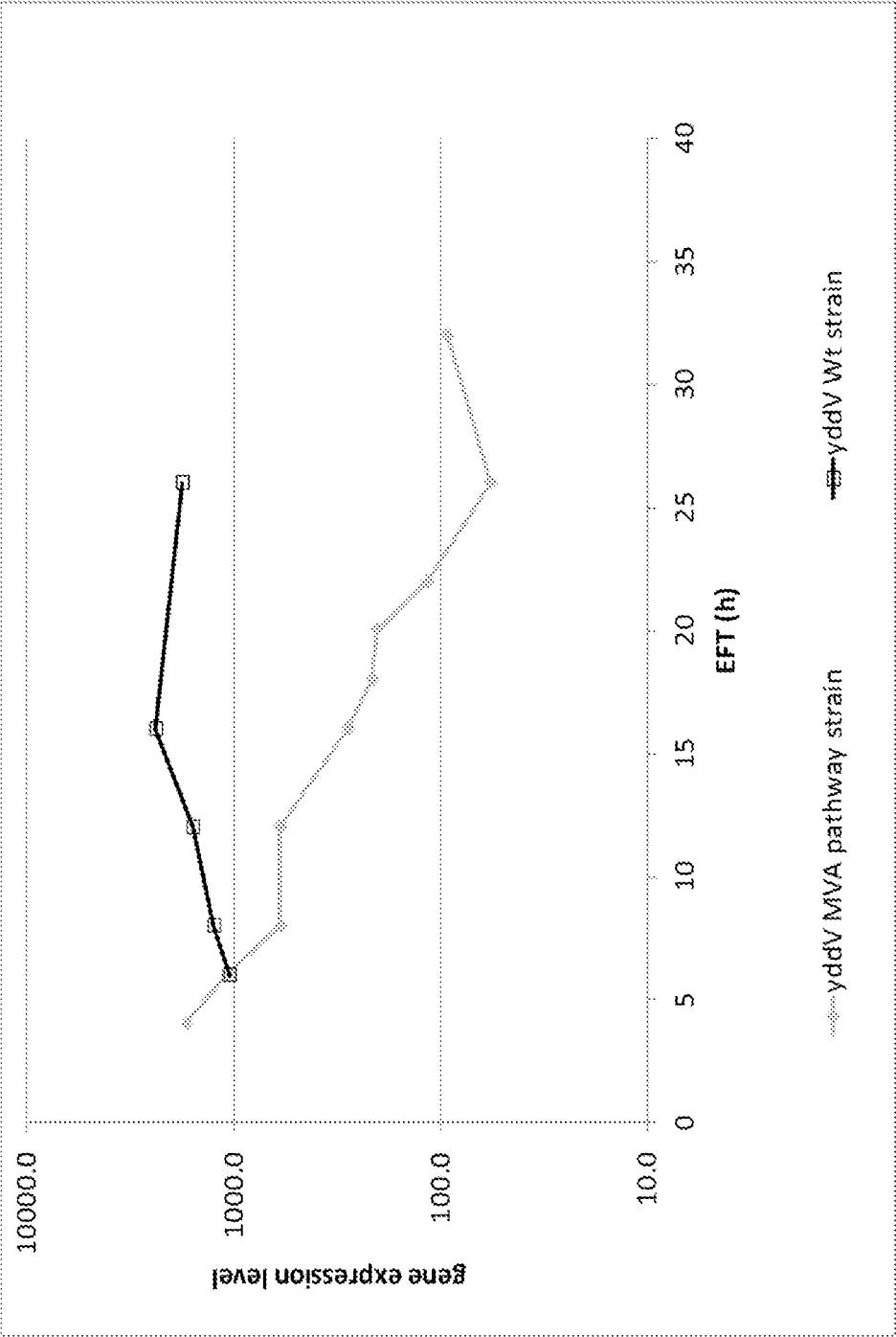


Figure 5

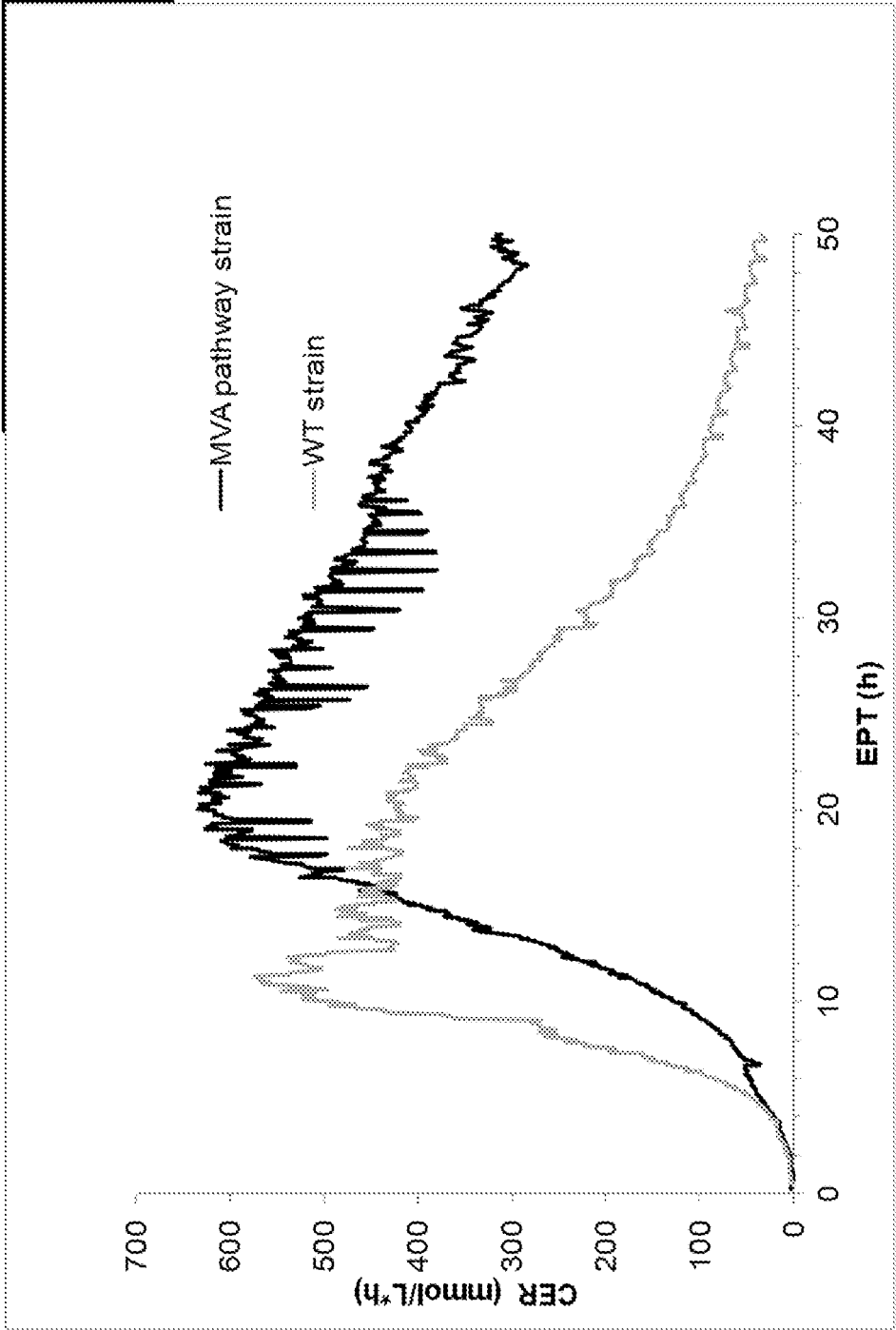


Figure 6

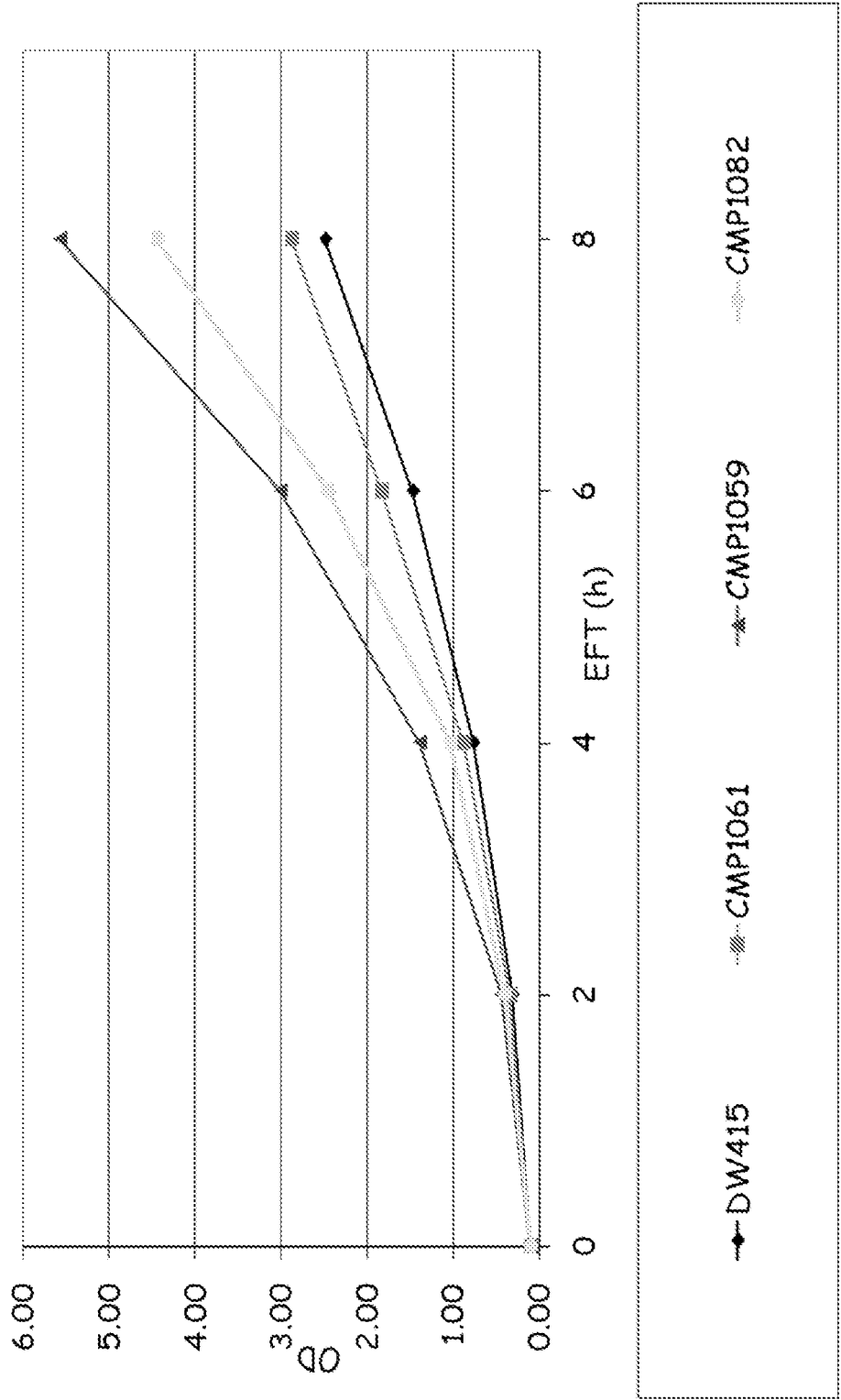


Figure 7a

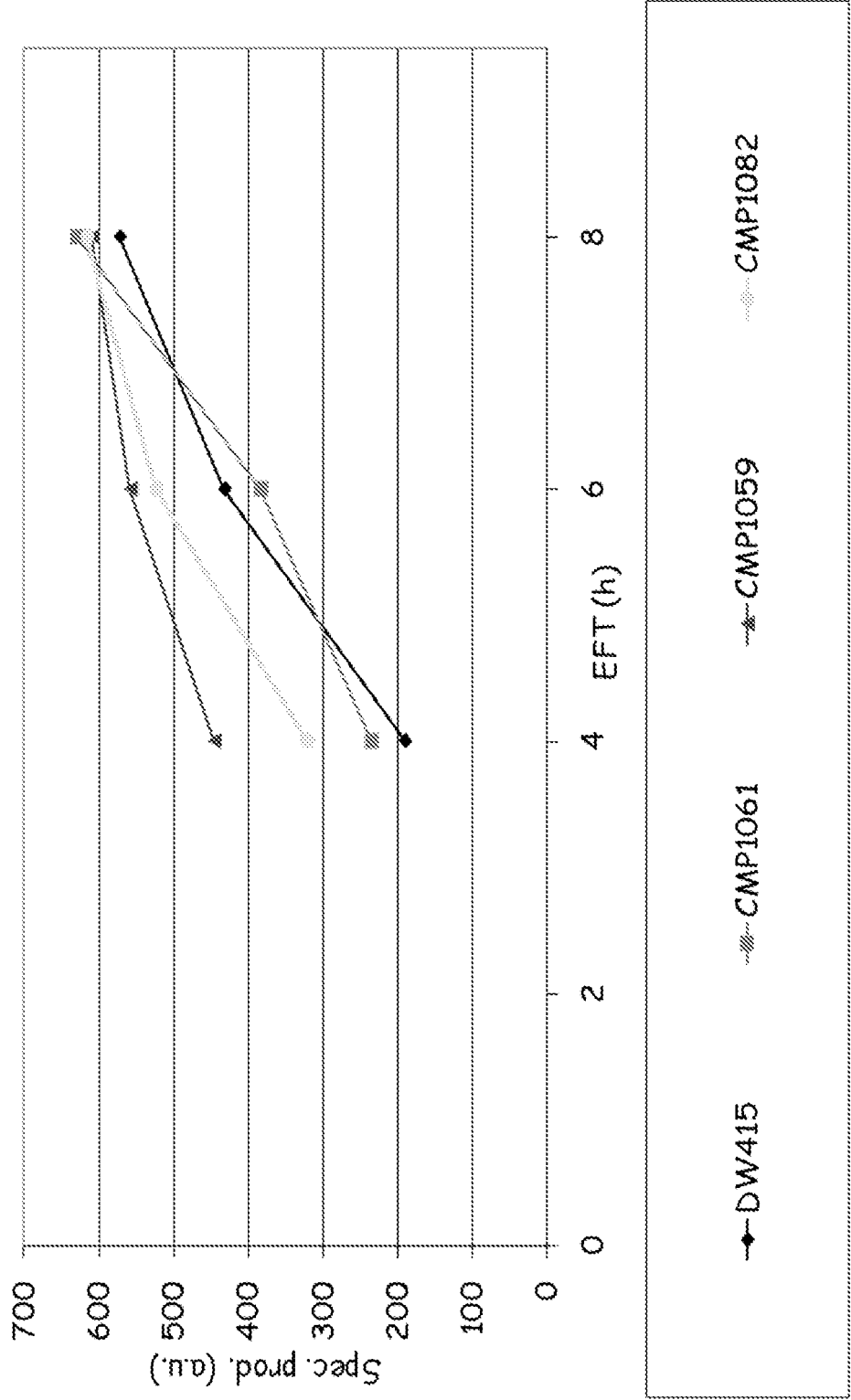


Figure 7b

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Figure 8

[illegible]

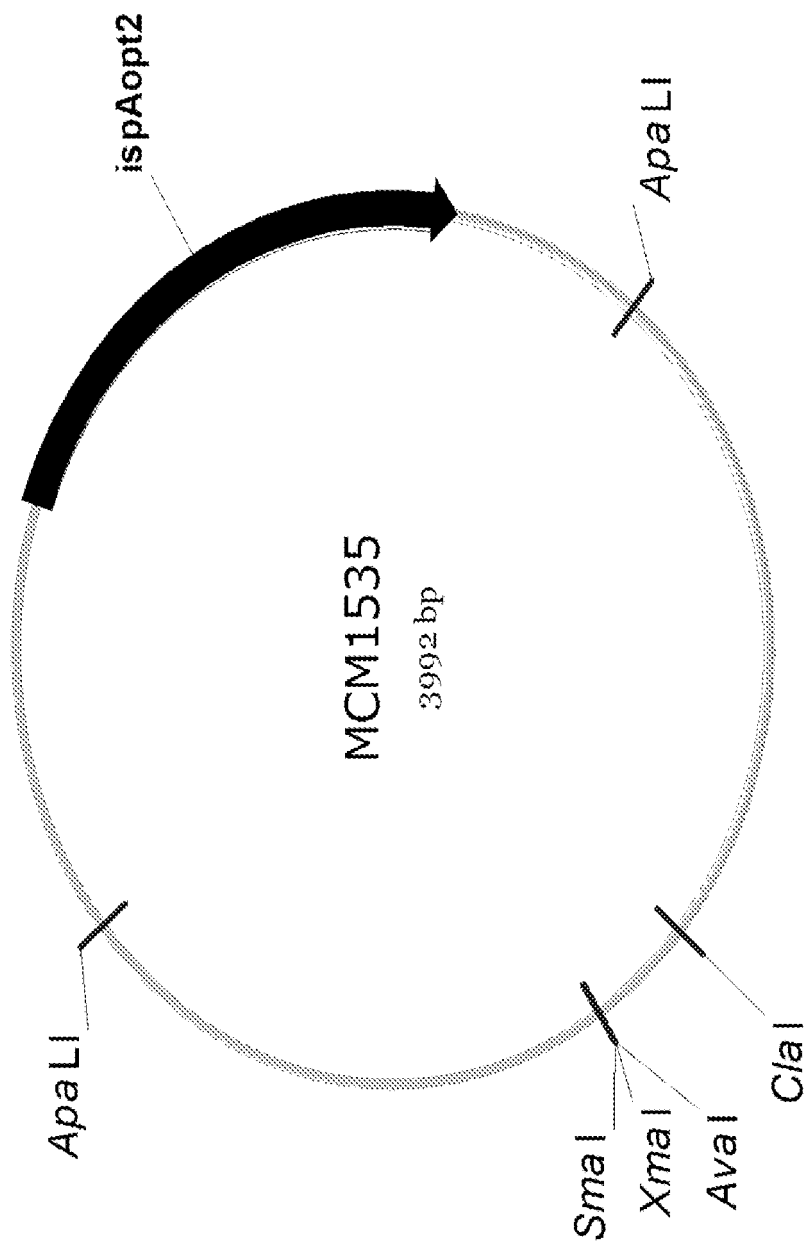


Figure 10

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Figure 11

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Figure 12

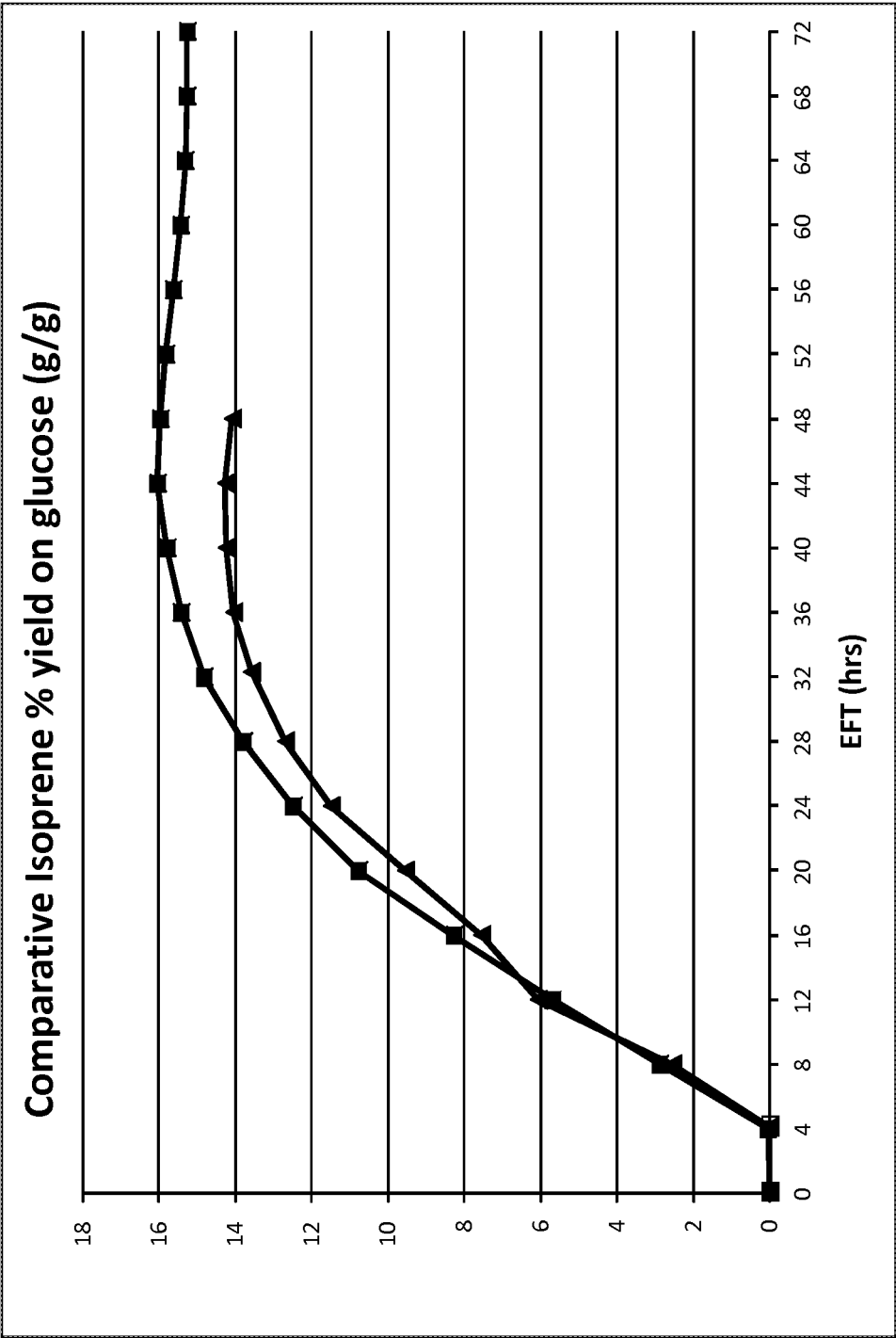


Figure 13

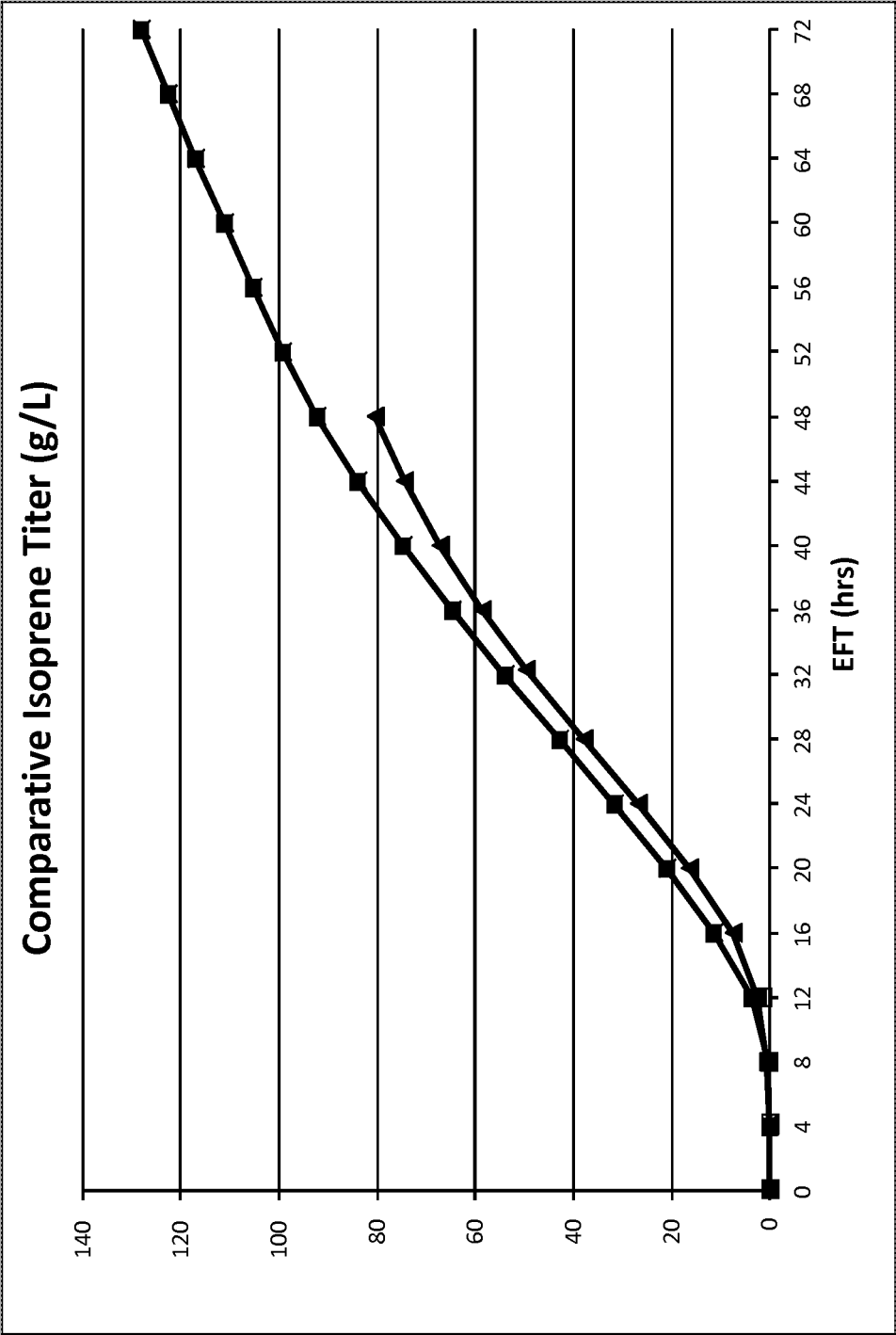


Figure 14

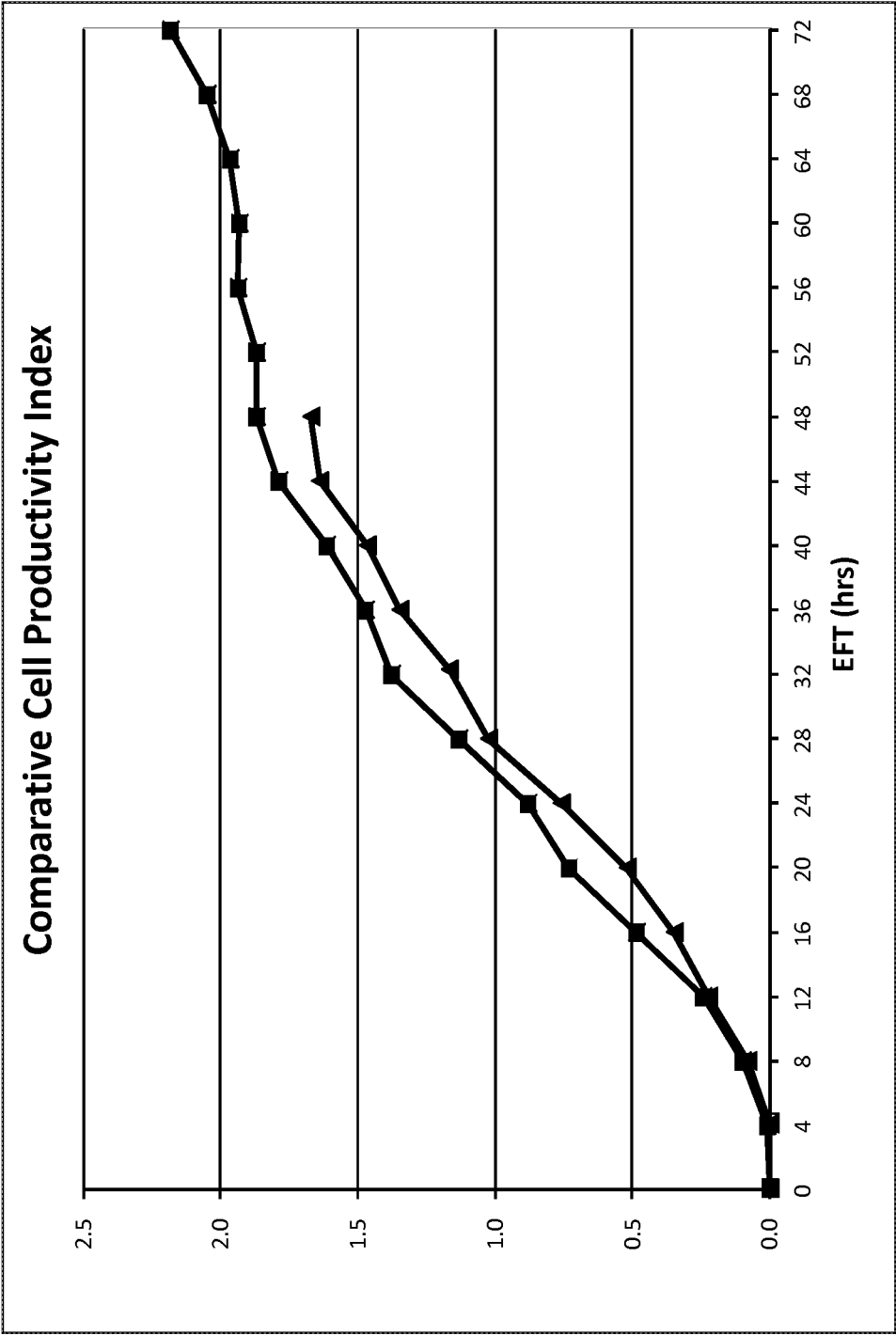


Figure 15

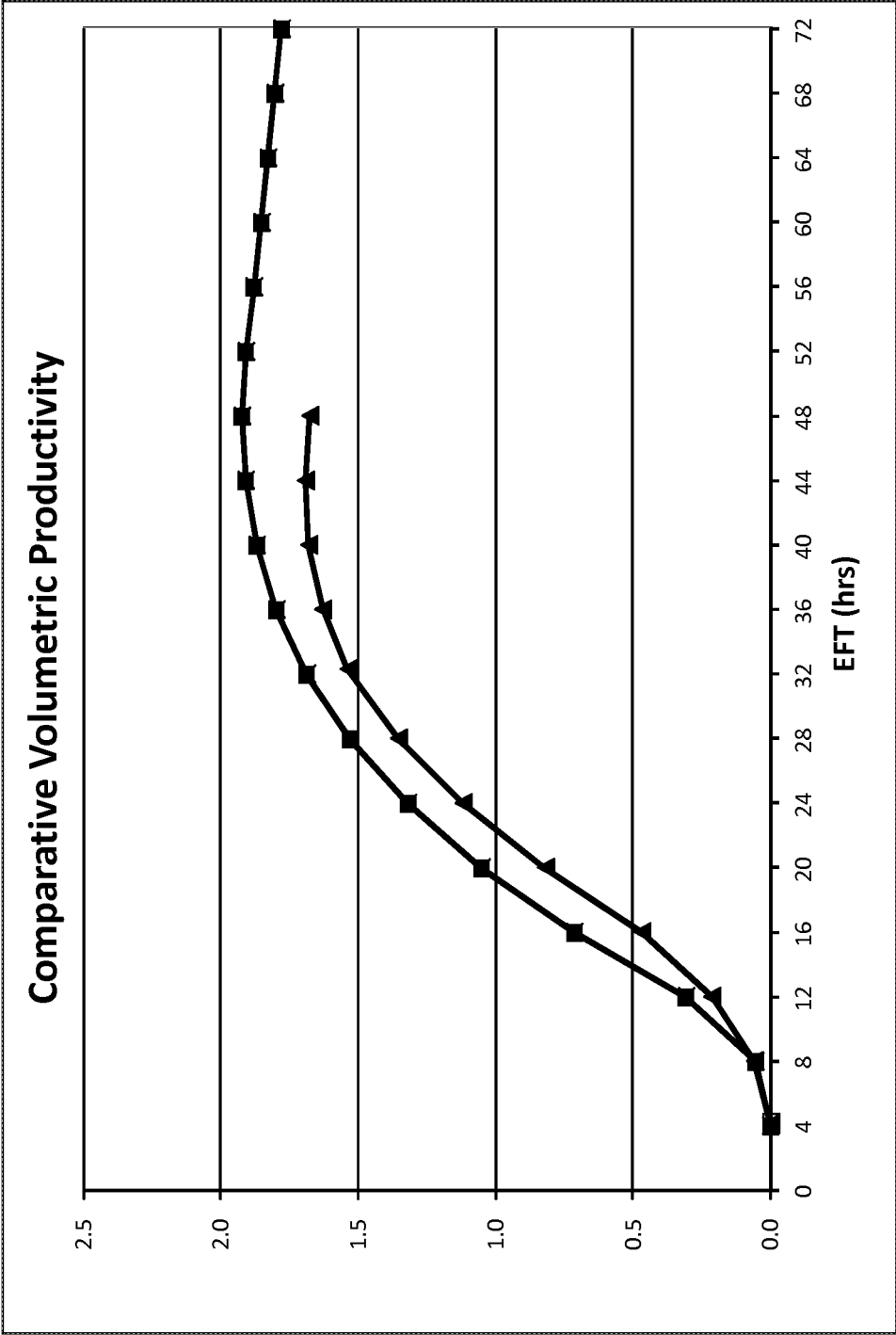


Figure 16

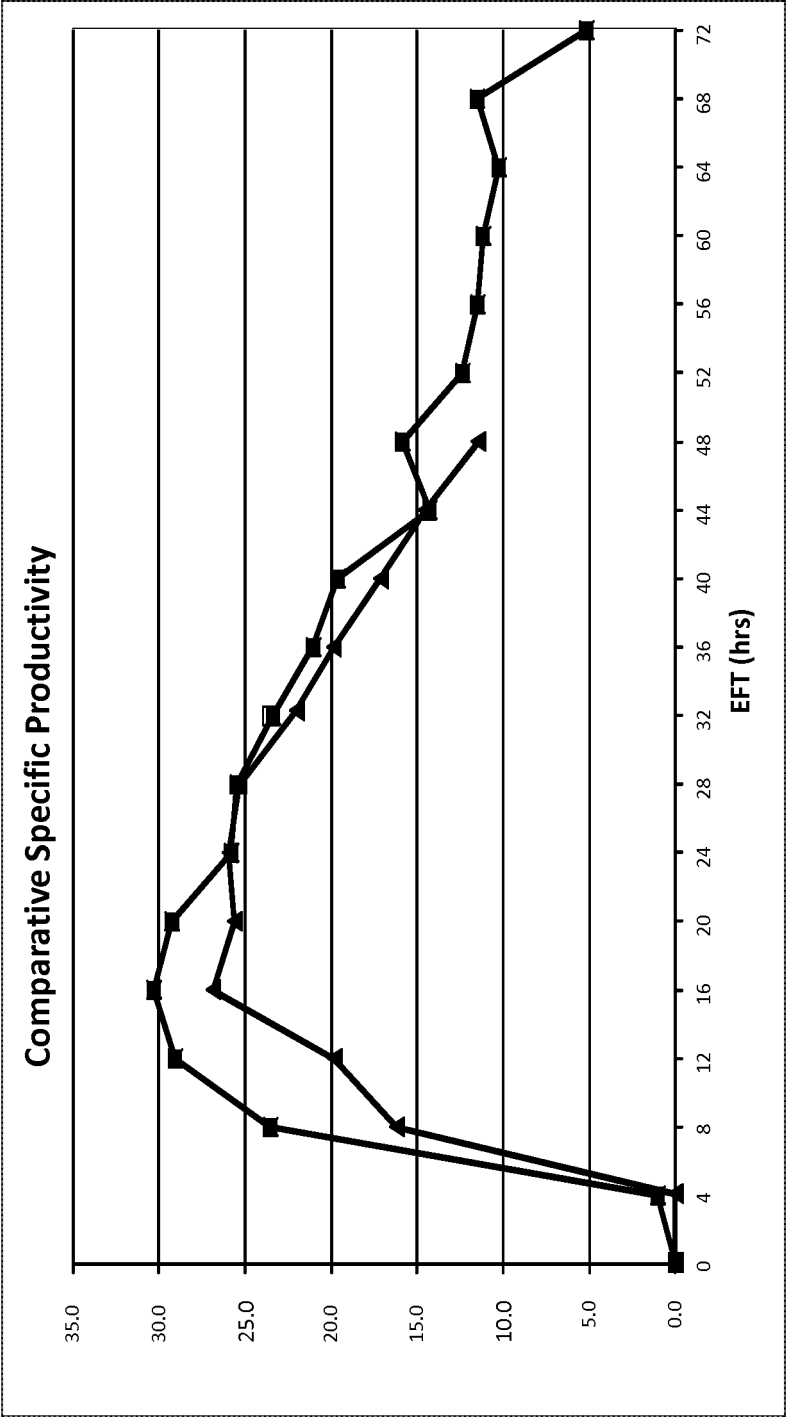


Figure 17

Codon-optimized nucleotide for *hrcA* allele expression in *E. coli*:

ATGACTCAACTTTTCCCGGTCCCATAGTTCCGACGCCAGGACTTGCAGAACTCGATGCGGGCTCGCGACA
TATTCAGACGTGTCGTAGAATCTTATCTGGAGACCGGTGAACCACTGGGCTCTCGCACGATTAGCAAAAGGTGG
TGTAGCACTAGCCCTGCGTCAATCCGCAATACAATGCAGGACTTGCCCCAGTTGGGGTTACTTGACGCACCT
CATACCAAGTCCGGCGGTATGCCGACACACGCTGTTTAAAGATGTTGTAGACGGGTTCCCTGGAAGTTGGC
GACGTGGCGGAGCAAGAGAAGCGGGCTATTGAAGCACGGCTGGCAGTGAAGGACGTTCCTTTGAAGAAG
CCCTTGGCGGAGGCAAGCTCTATTTAAGCGGTCTGGCTGGCGGAGCGGGCATTGTCGTCACCTCCGGTACGGG
AAGGCGGGGTCAACATGTTGAGTTGTGCCGCTGGAGGTGTCAGGTTCTGGCTGTGATGTCCTTTGAA
GATGGCCAAGTAGAAACCGCTTAATGCGCCAGGCCCGCGTCAACCCCTTCTGCTCTACAGGAAGCCTCG
AATTCTTGAATGCCCGTTTACGTGGACGGACACTCACGGAAGCCCGTACCGAAATGGAGGTGAACCTTGAT
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AGAAGGAGACGCCCGCAGCTTGATCGTTCGCGGACAGGCGAACCTTCTTGCCGATGCTCGTCACGCGAGG
ATATAGACCGGTTTCGTGTCAGTTGTTTCGATGATTTGAGTCGCCGTGCGCAACTCATCGGGCTCCTCGATGATGC
CGGACGCGGAAGGTGTGCGCATTATATTGGAGCTGAACCCGCTGTCTCACTTTCTGGAAGCTCGGTG
ATCGTGCCCCGTACATGACAGGCCGTCAAAGGTATTGGGCGCCCATAGGGGTTATCGGACCTGCCCGCTTGA
ATTACGCTCGCGTTATCCCACTCGTGGATTATACGGCACGCGTTTGGGCCGTATGATGGACGGT**TGA**.

Figure 18

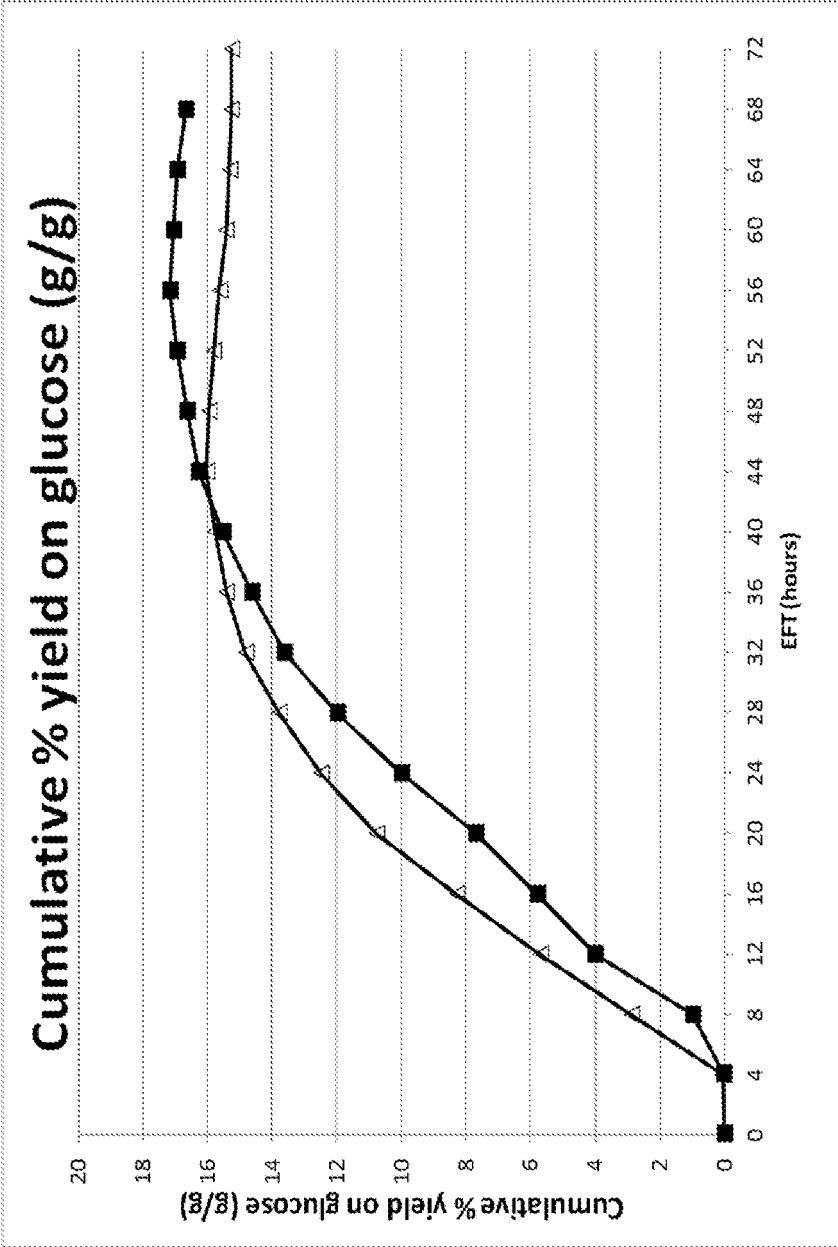


Figure 19

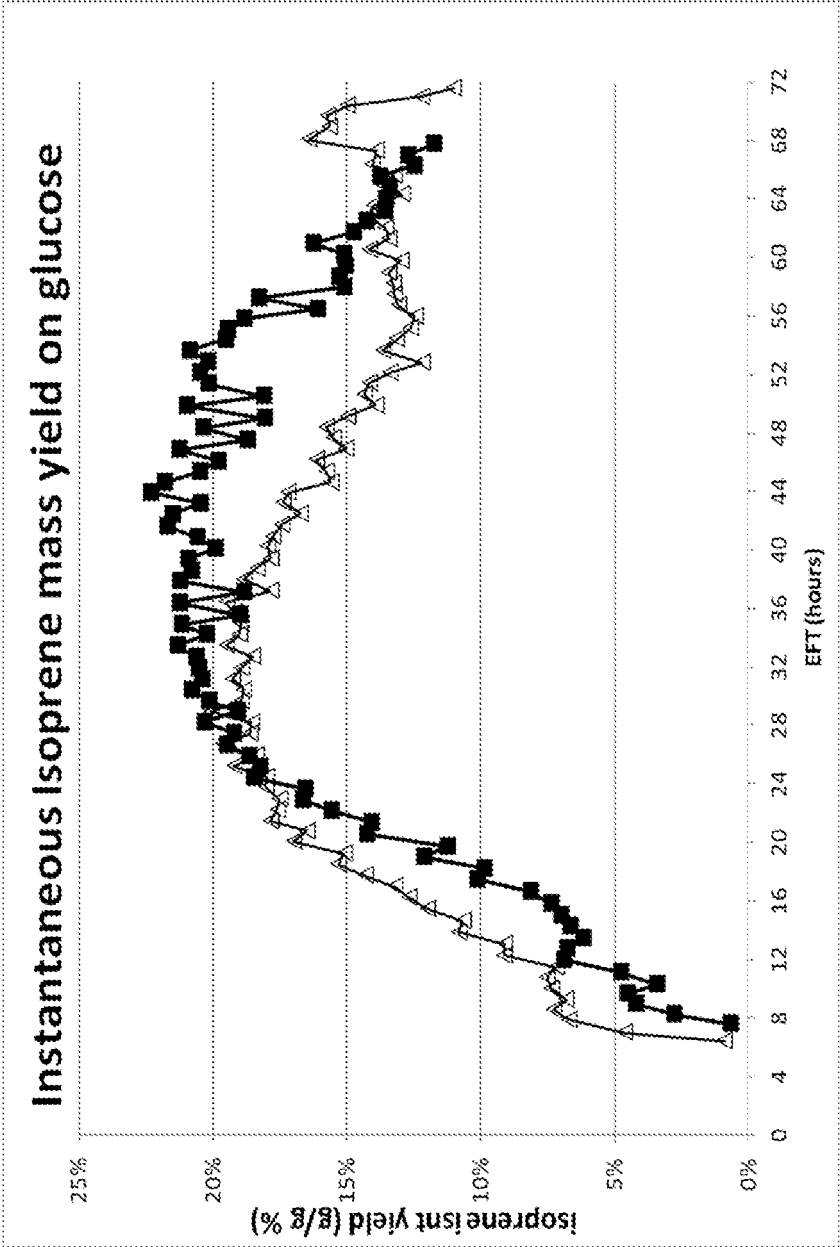


Figure 20

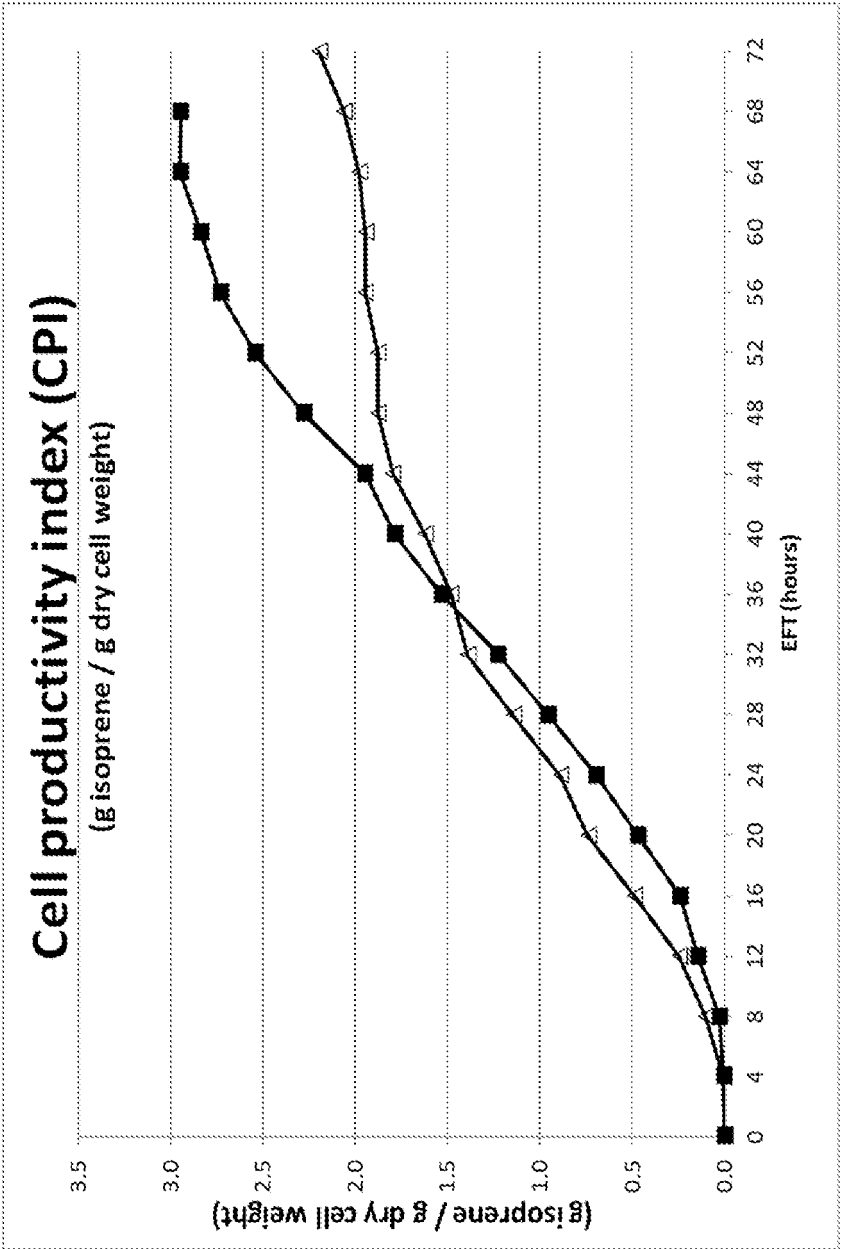


Figure 21

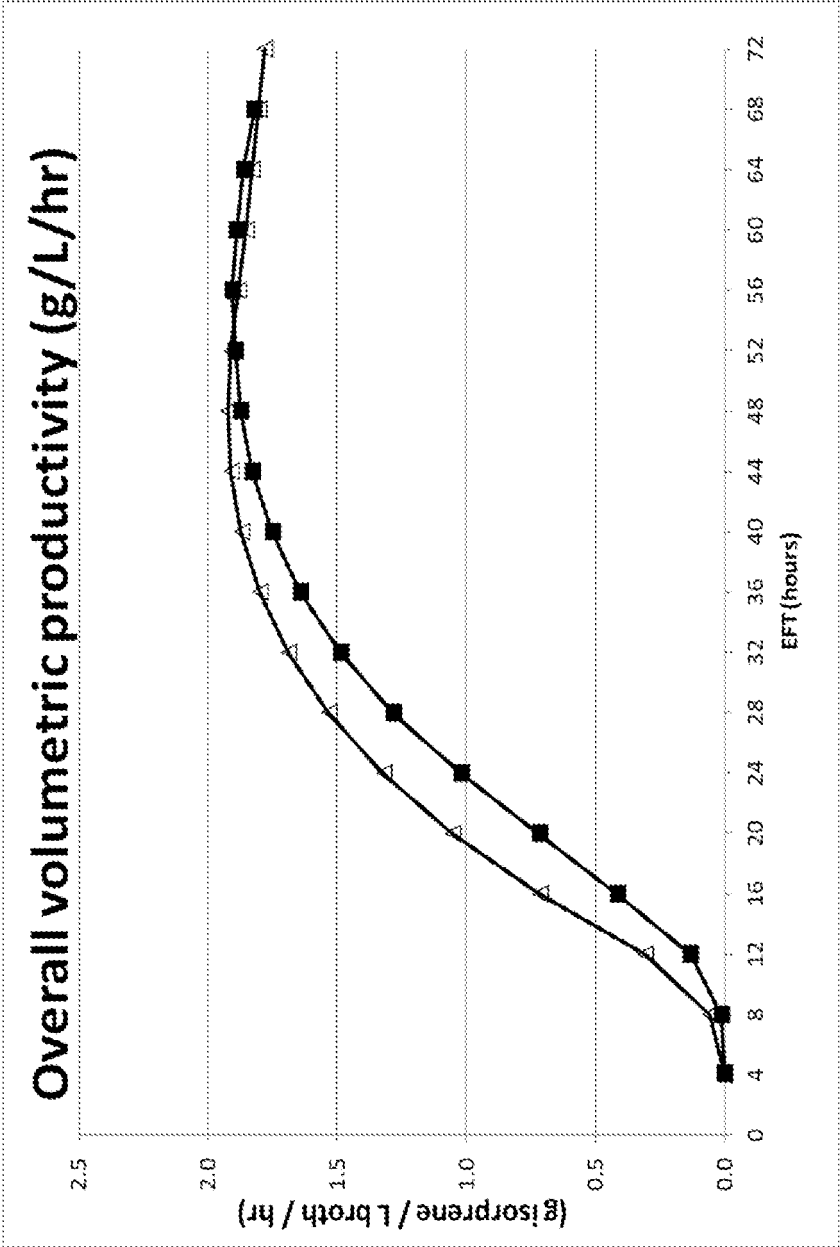


Figure 22

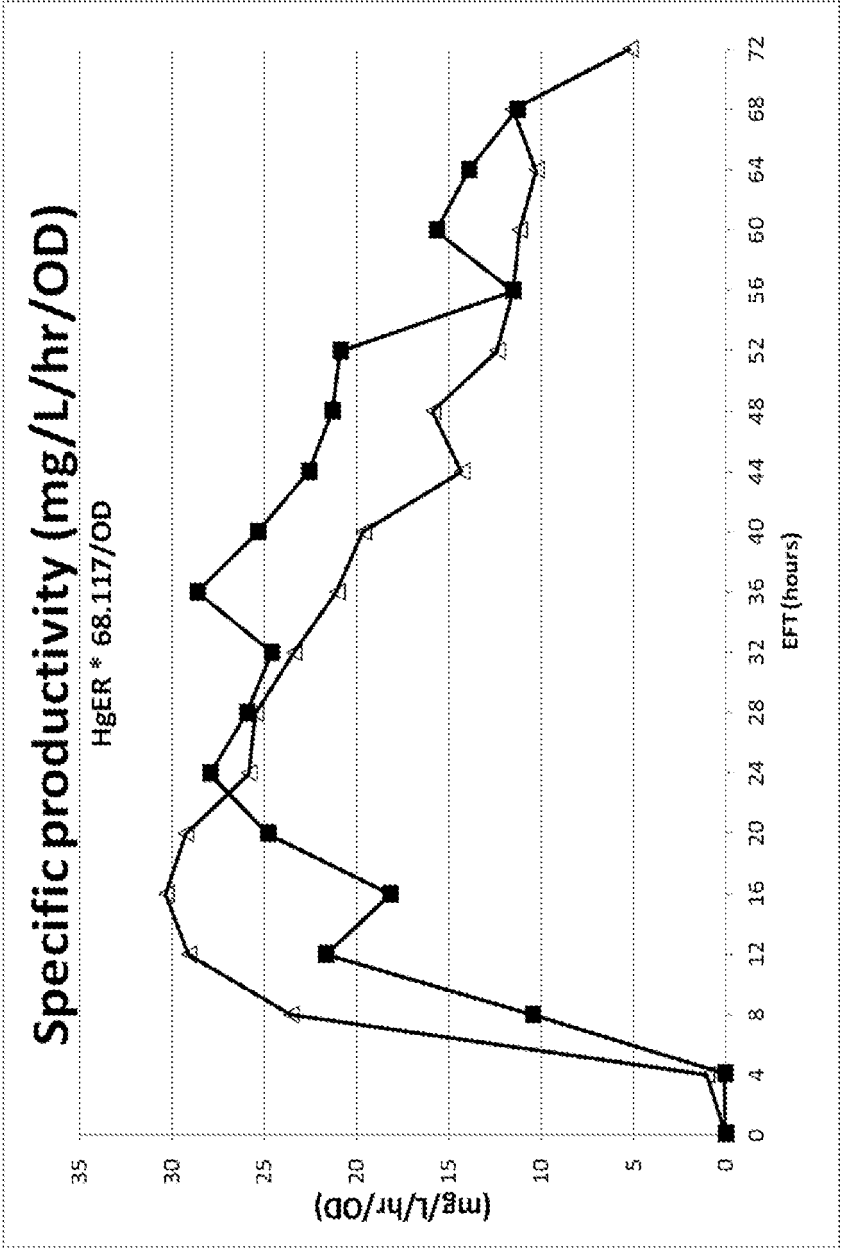


Figure 23

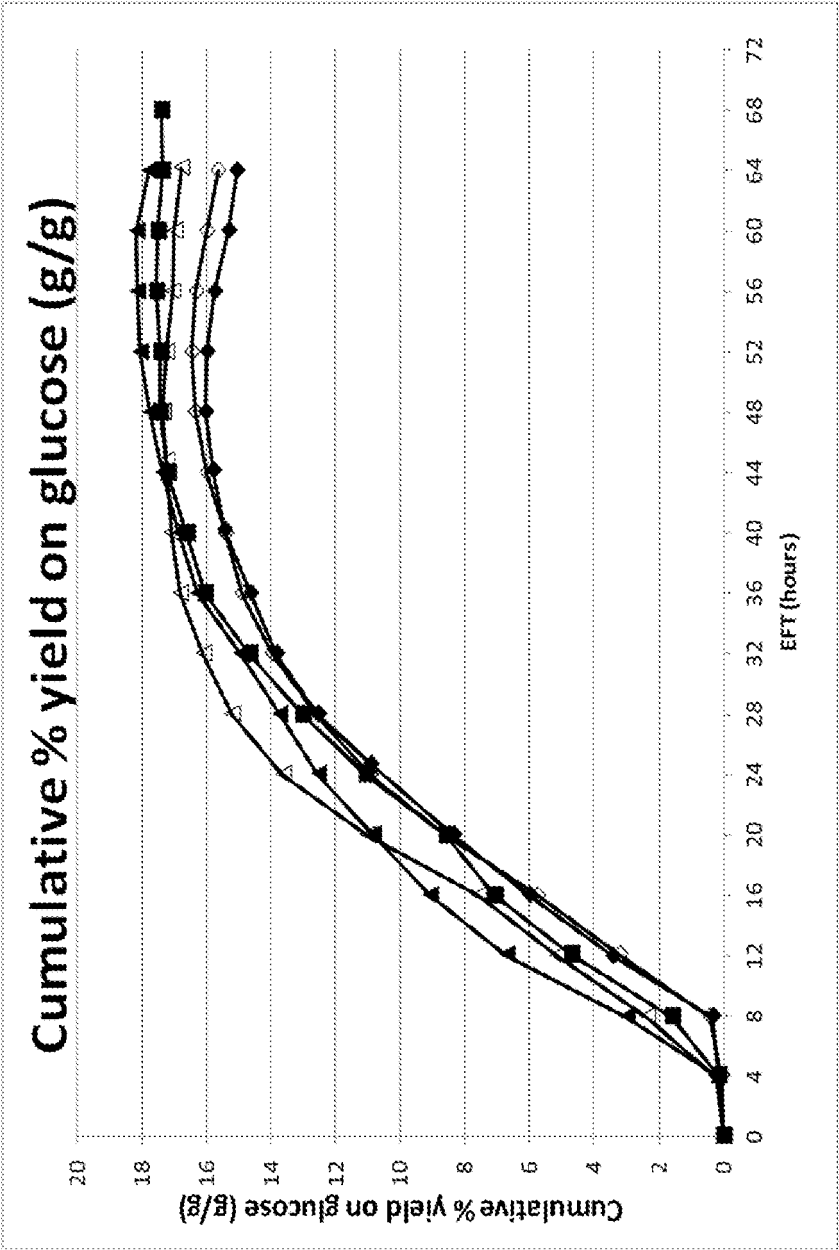


Figure 24

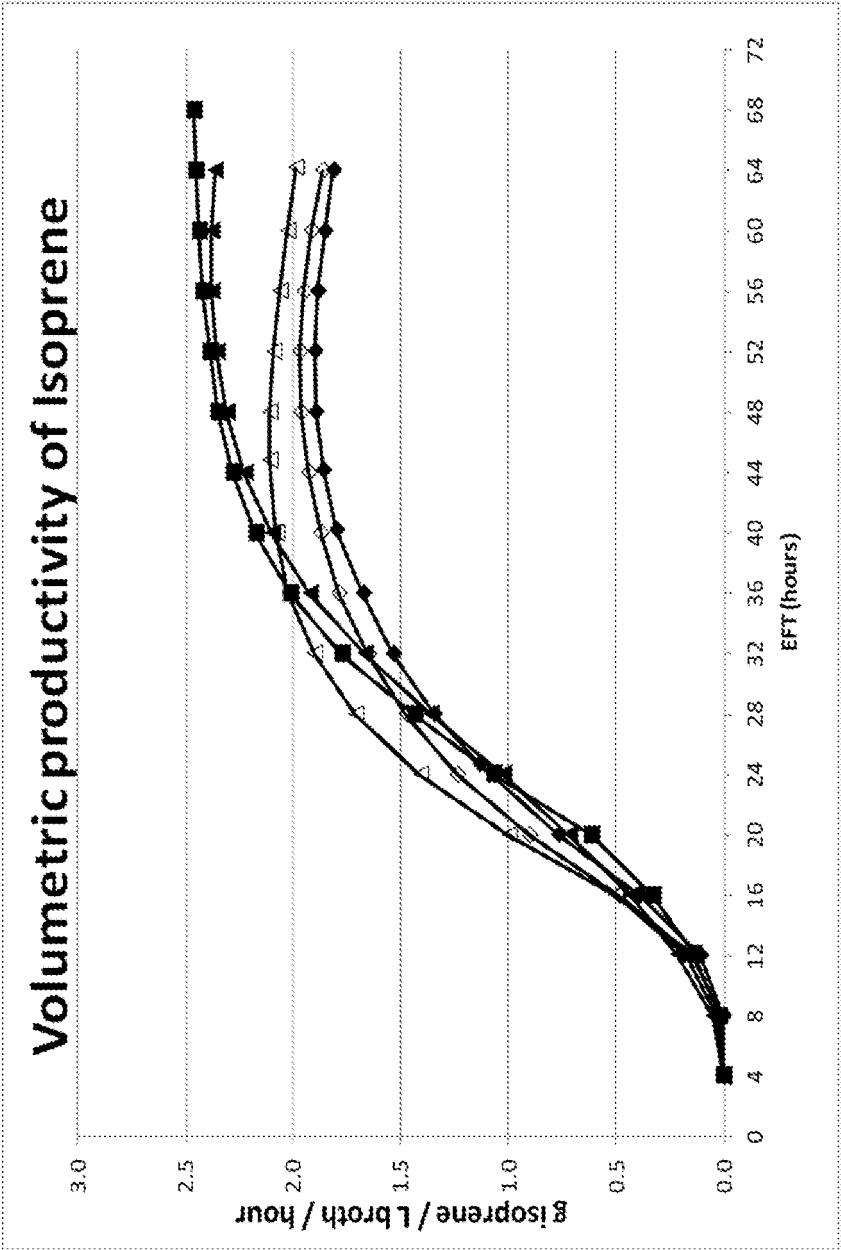


Figure 25

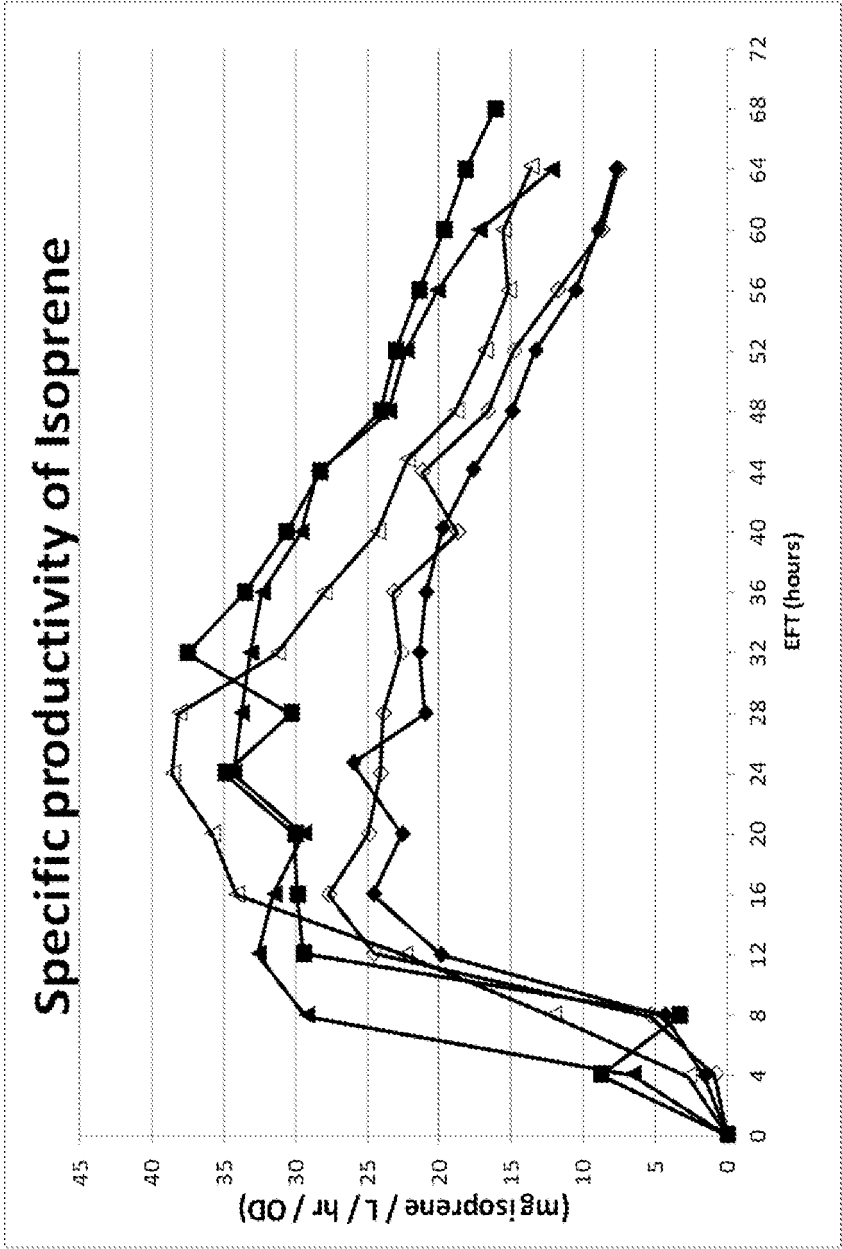


Figure 26

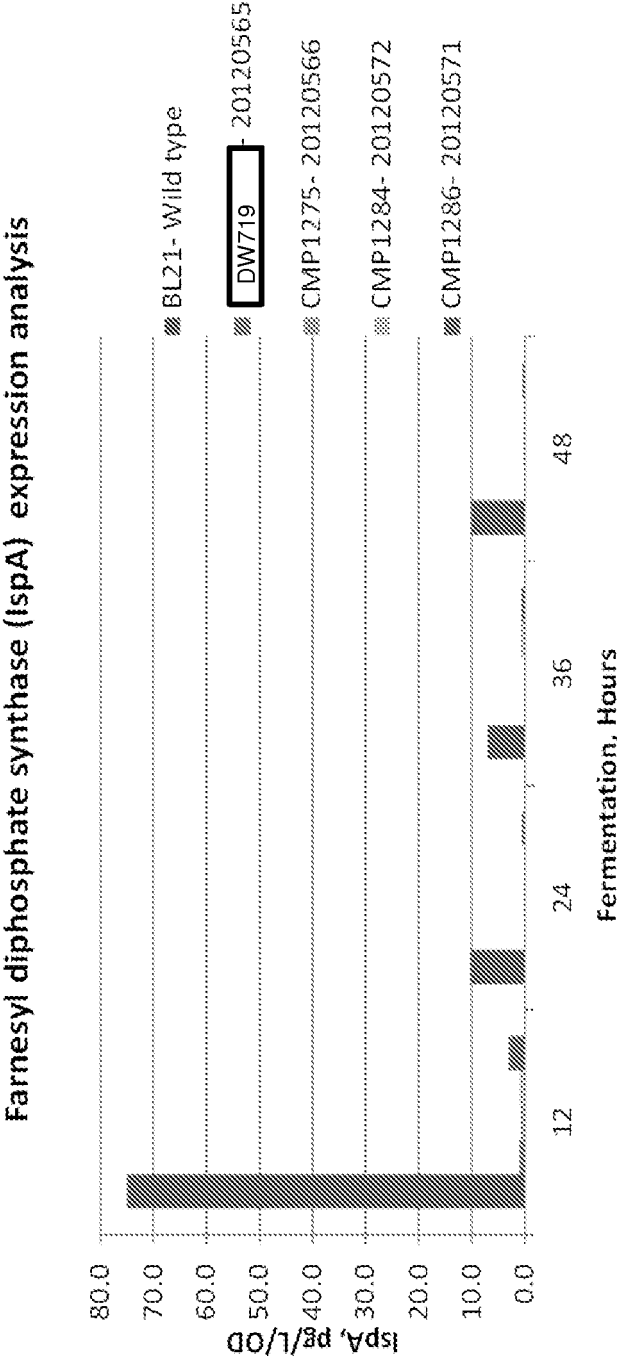


Figure 27

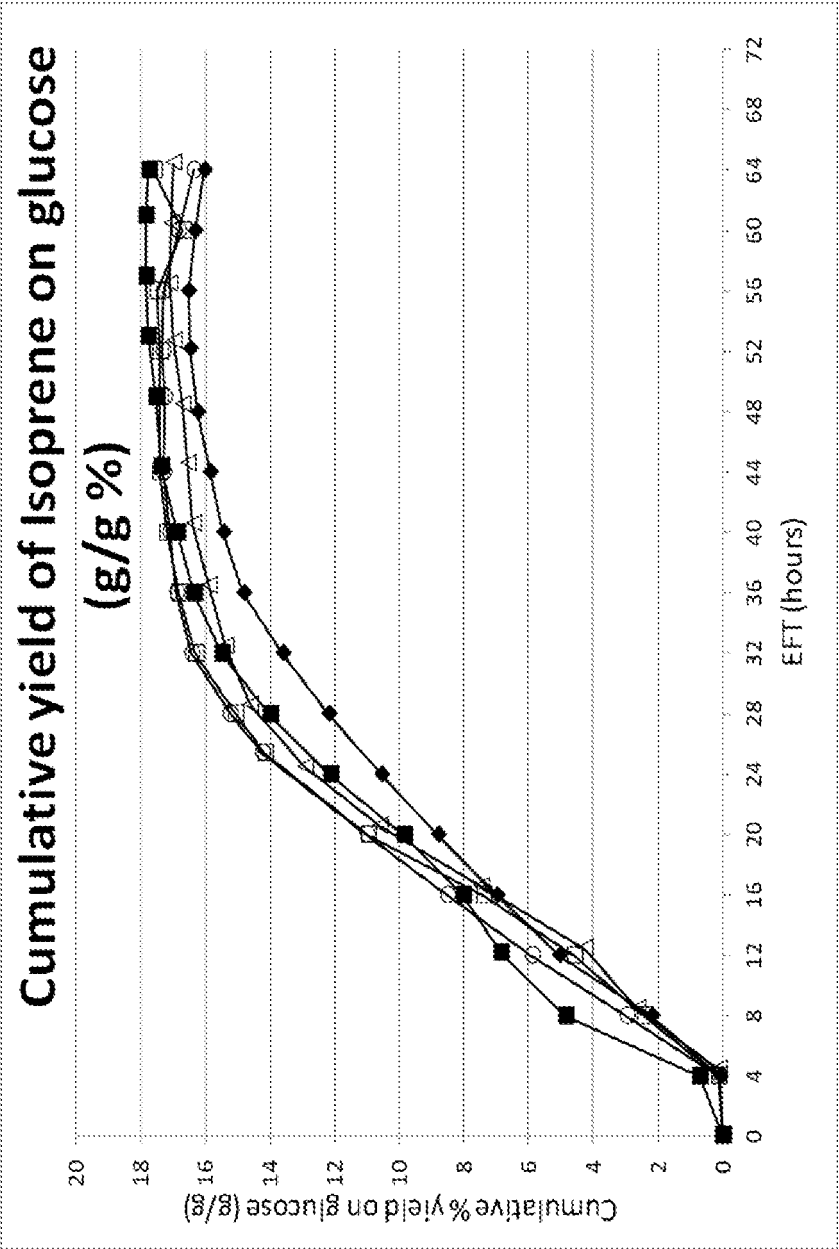


Figure 28

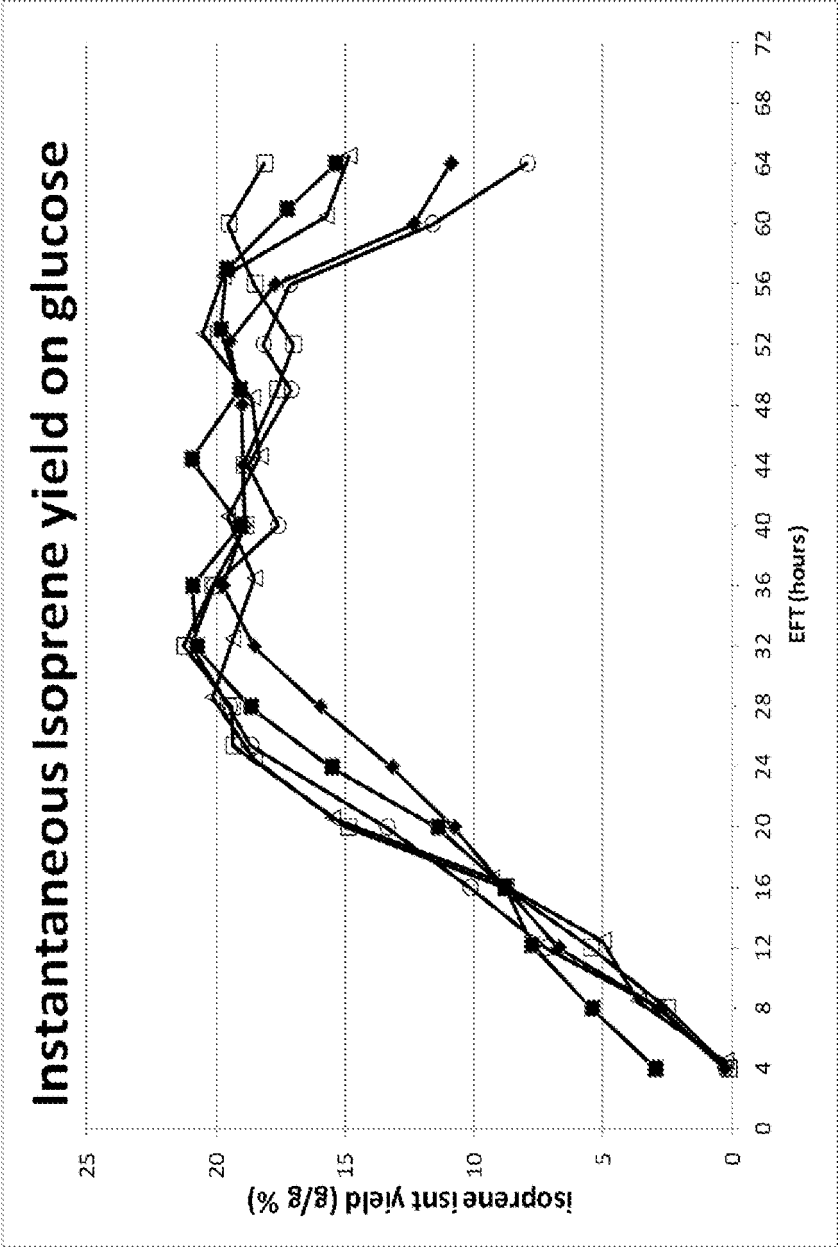


Figure 29

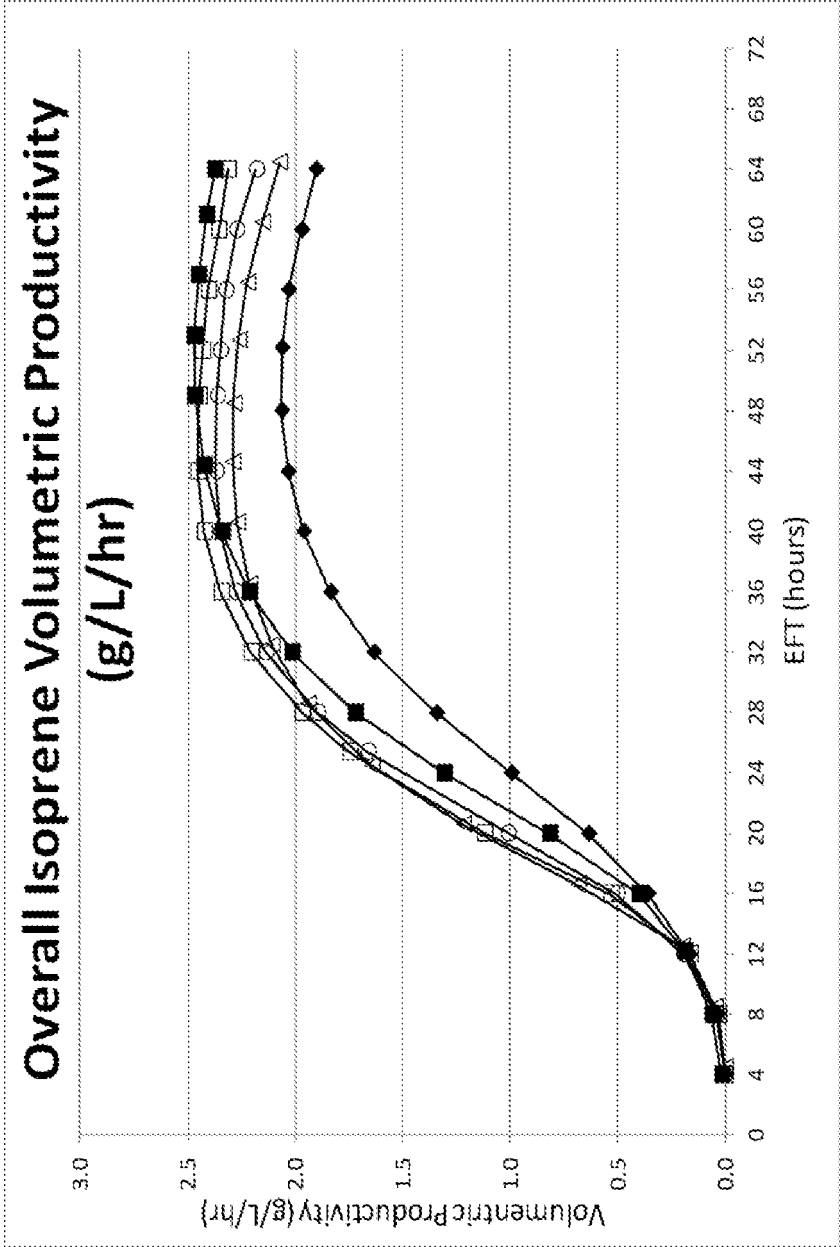


Figure 30

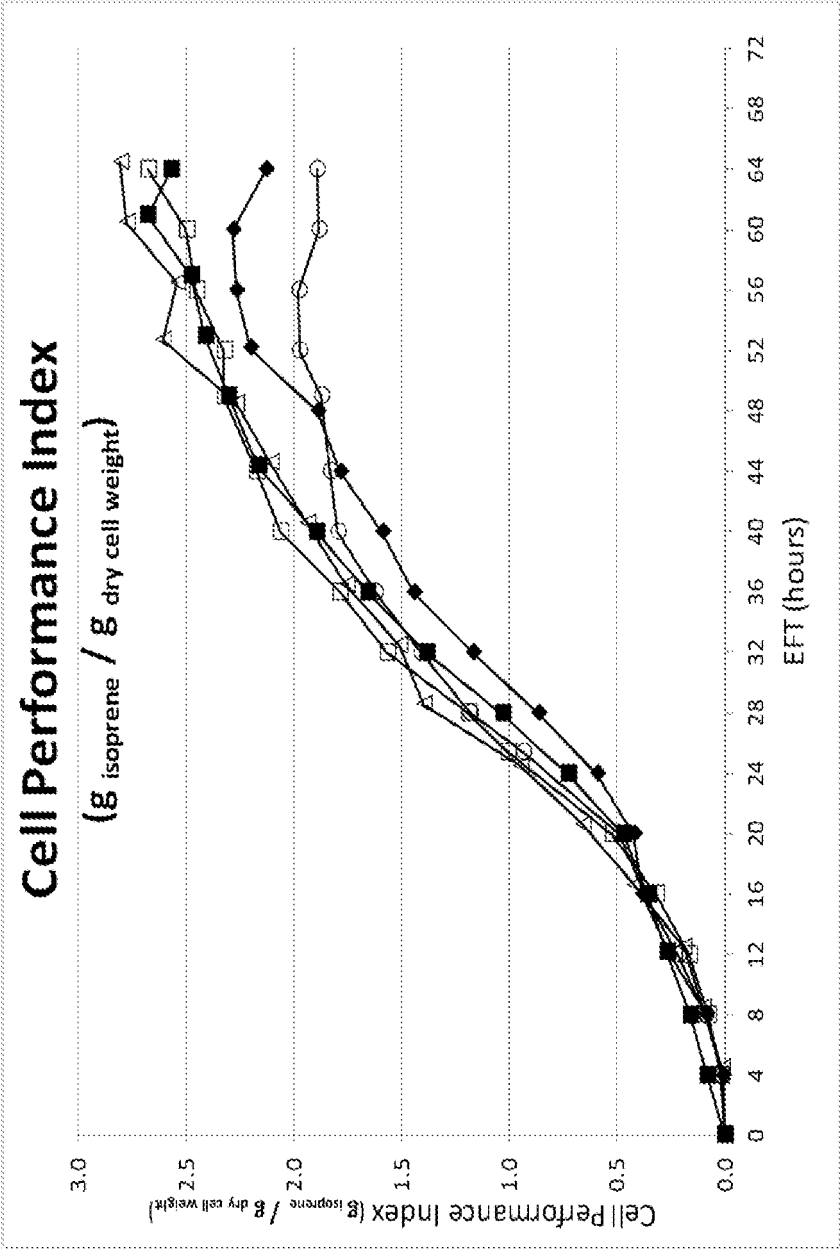


Figure 31

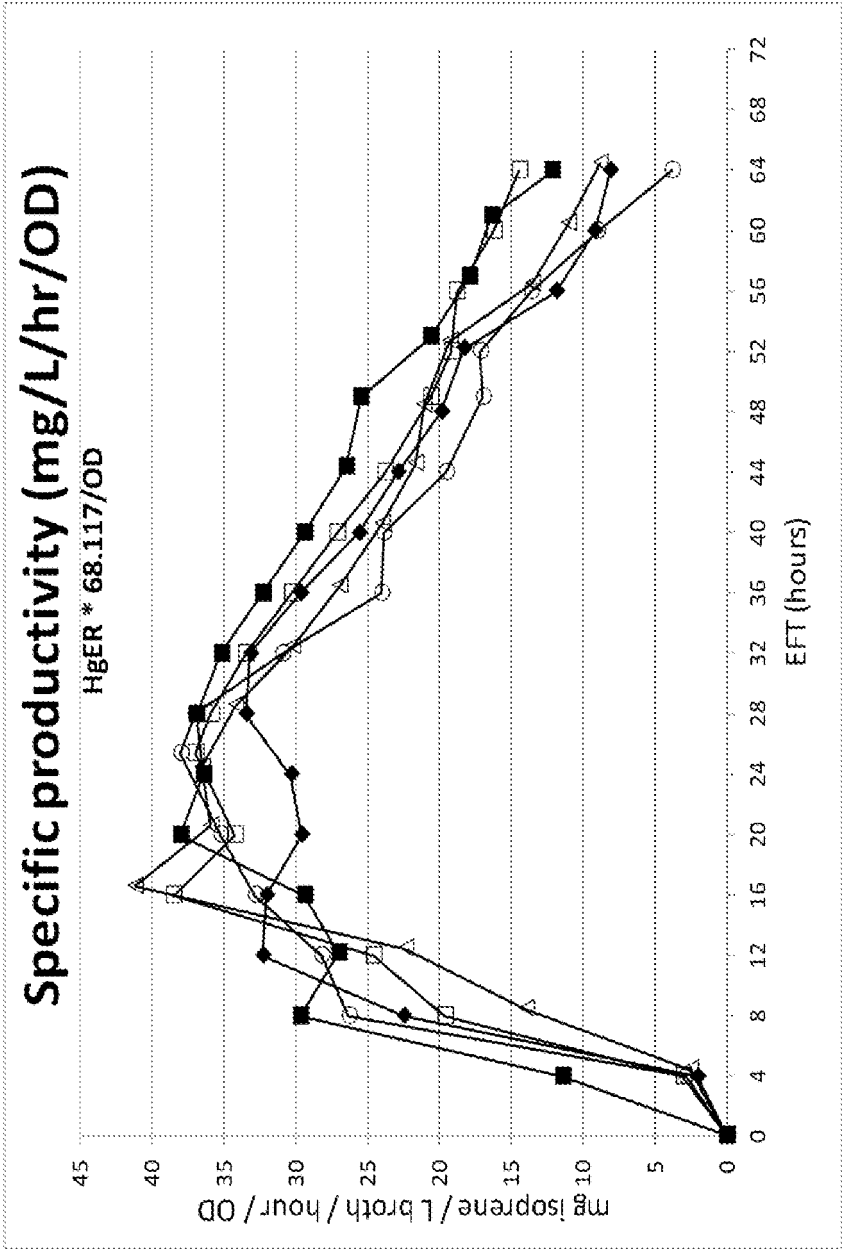


Figure 32

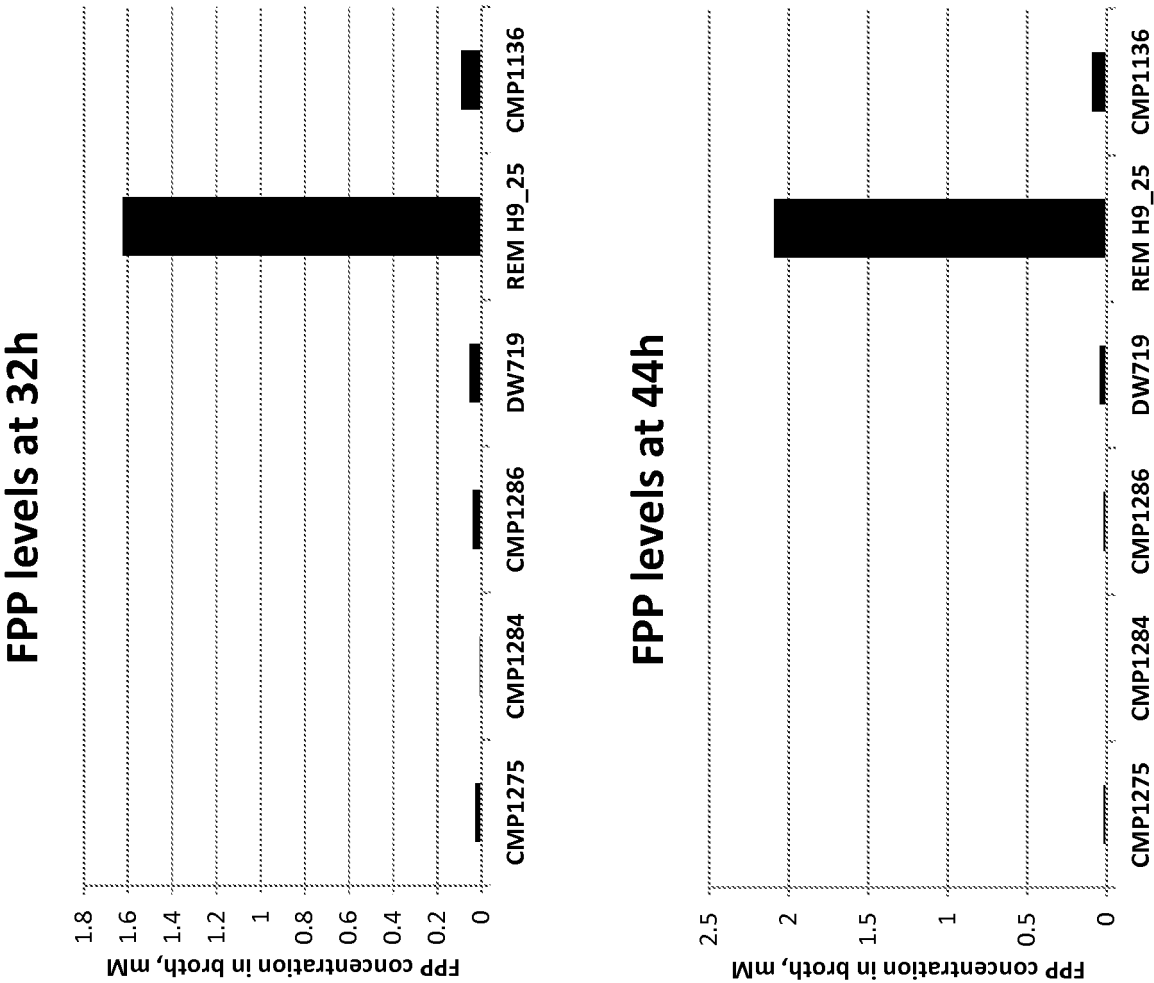


Figure 33

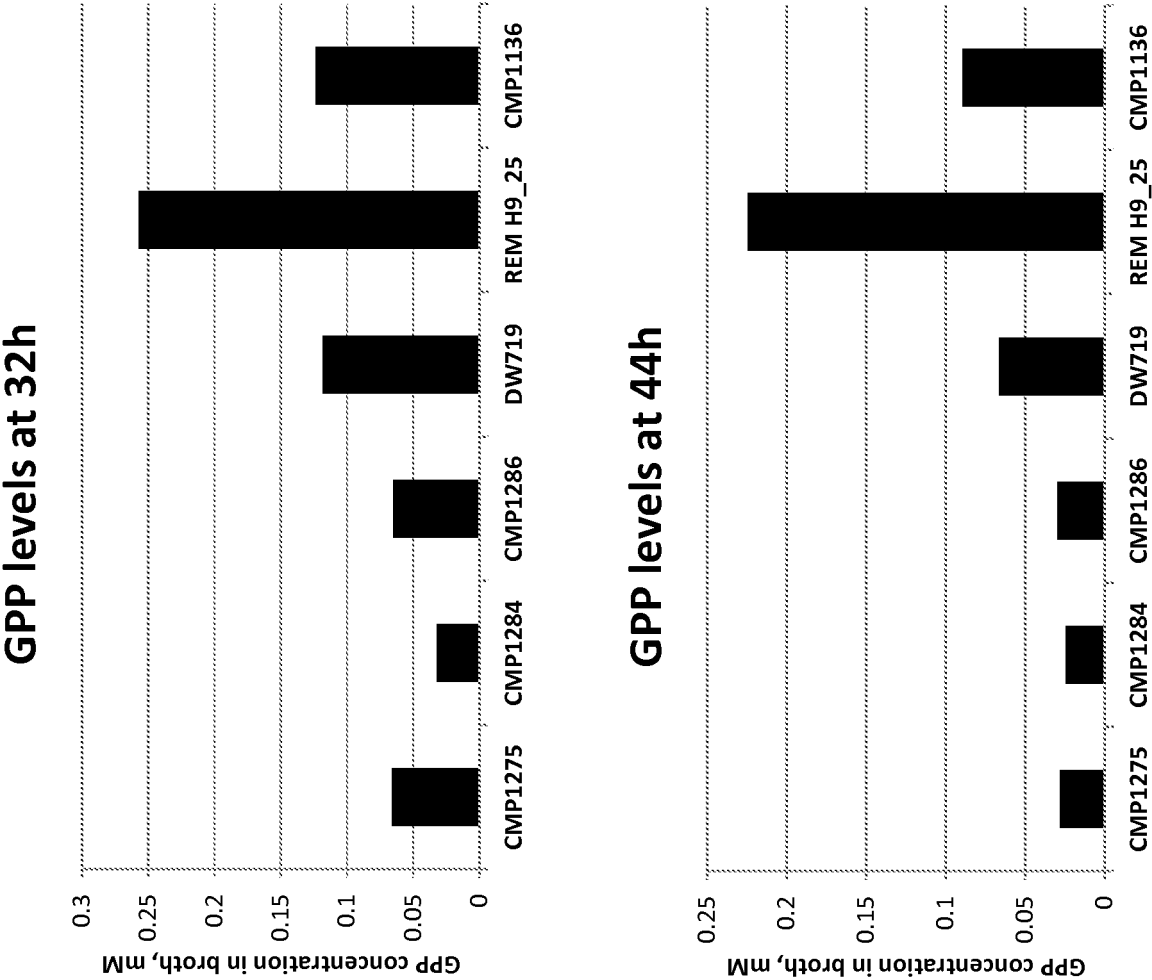
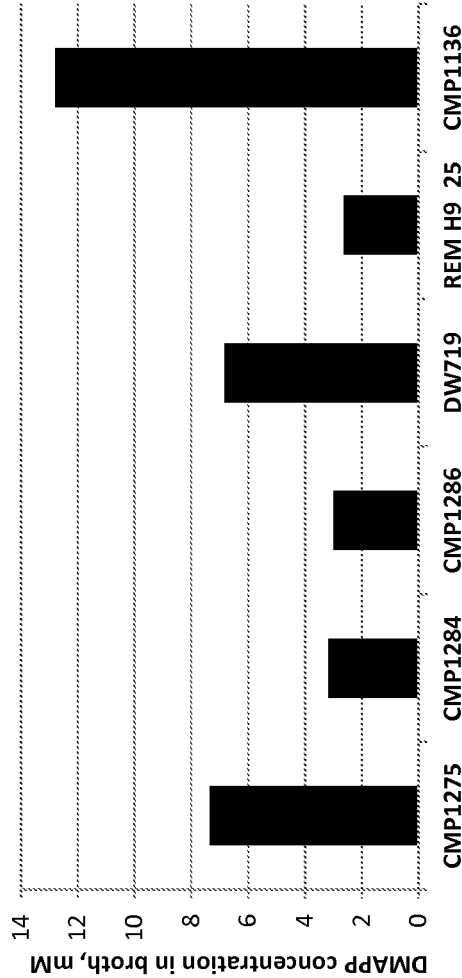


Figure 34

DMAPP levels at 32h



DMAPP levels at 44h

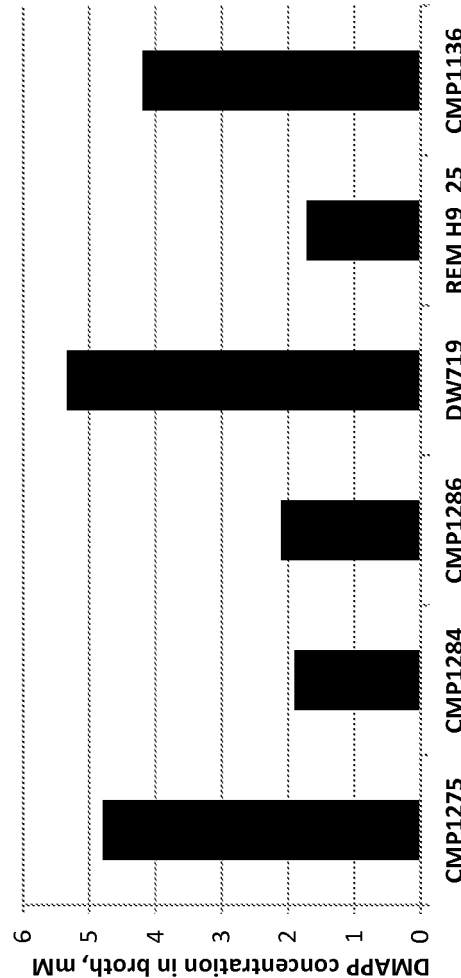
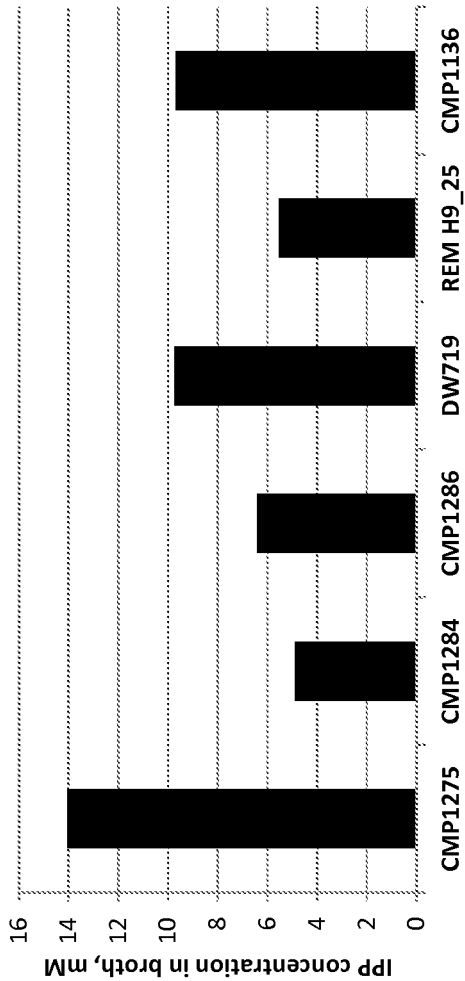


Figure 35

IPP levels at 32h



IPP levels at 44h

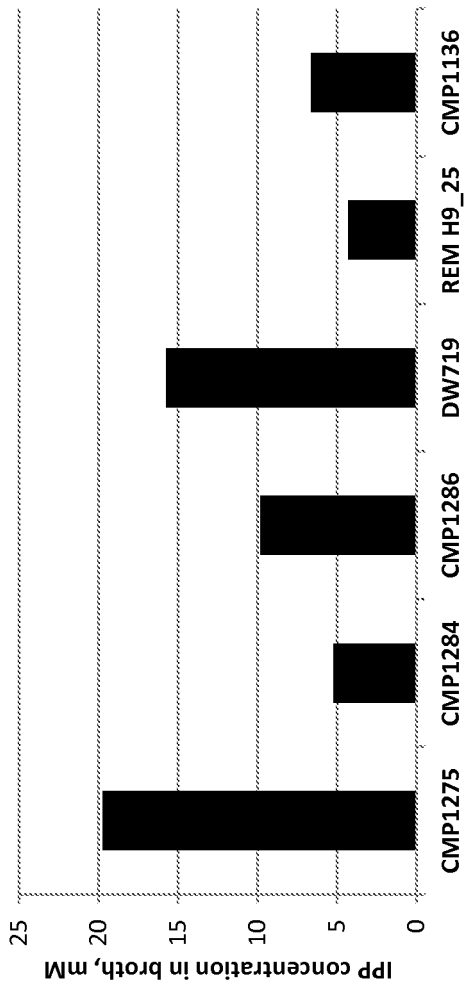


Figure 36

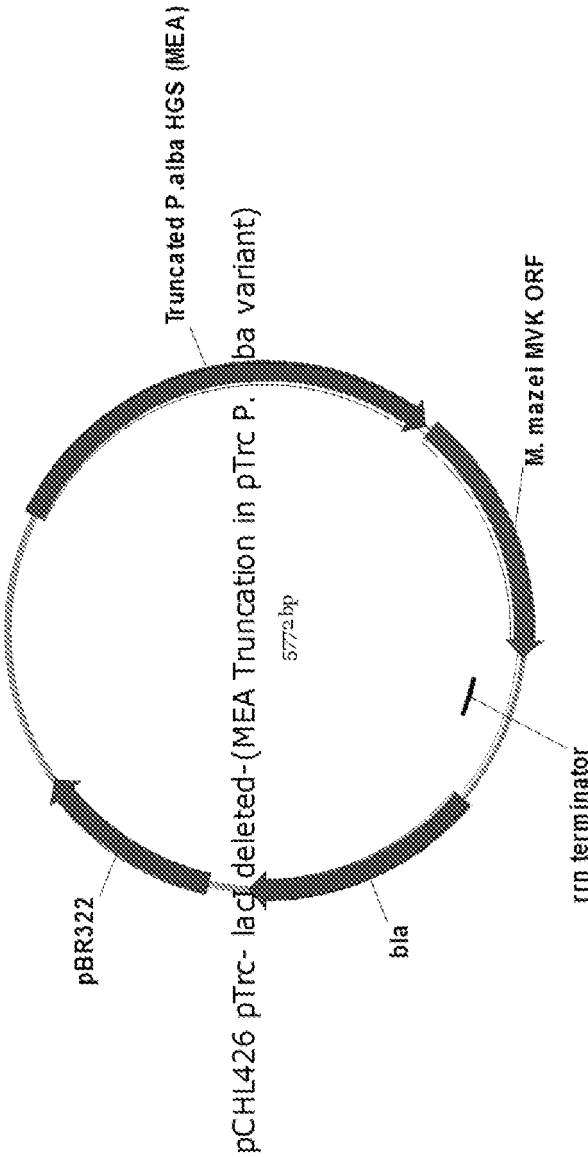


Figure 37

Figure 38

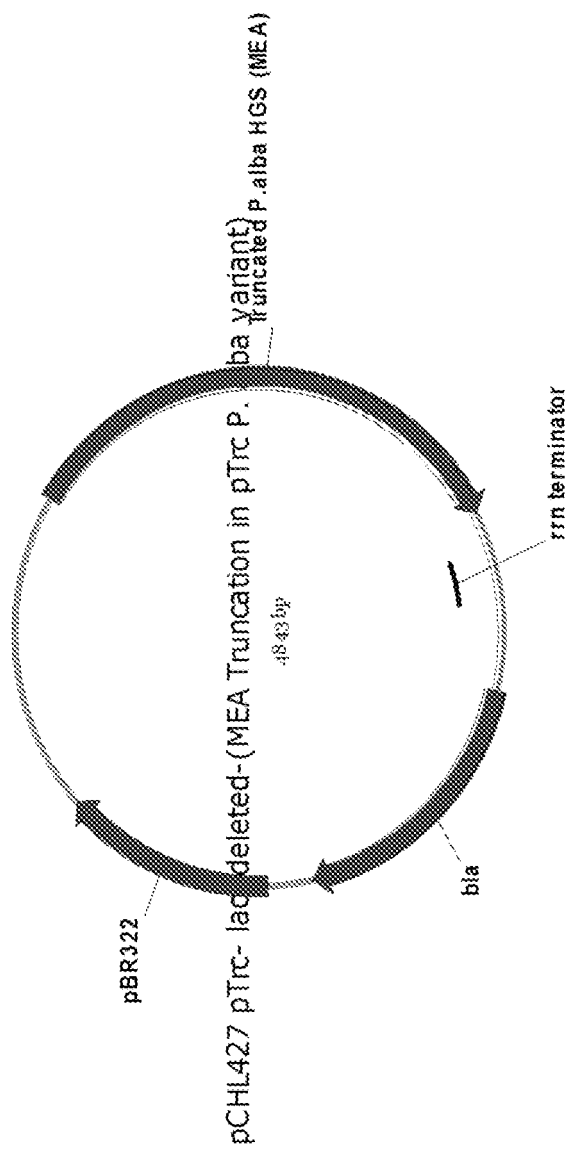


Figure 39

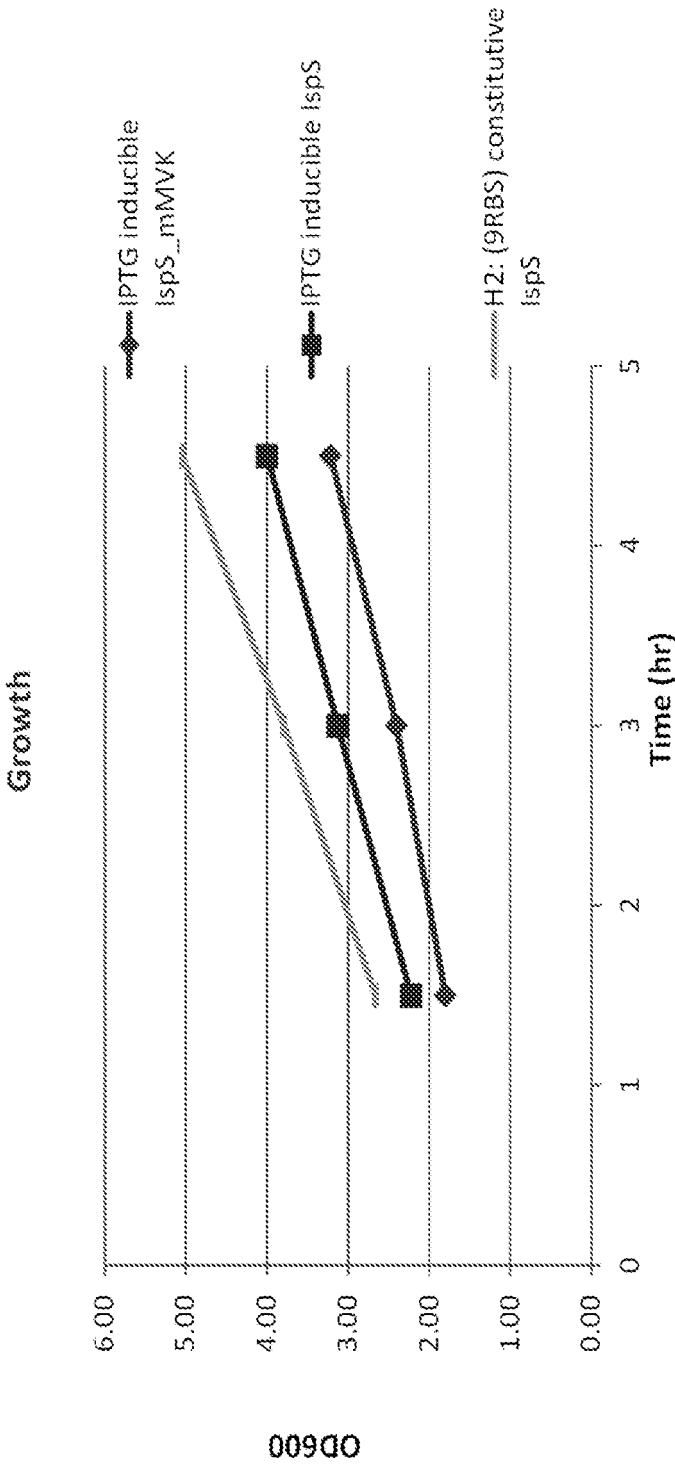


Figure 41

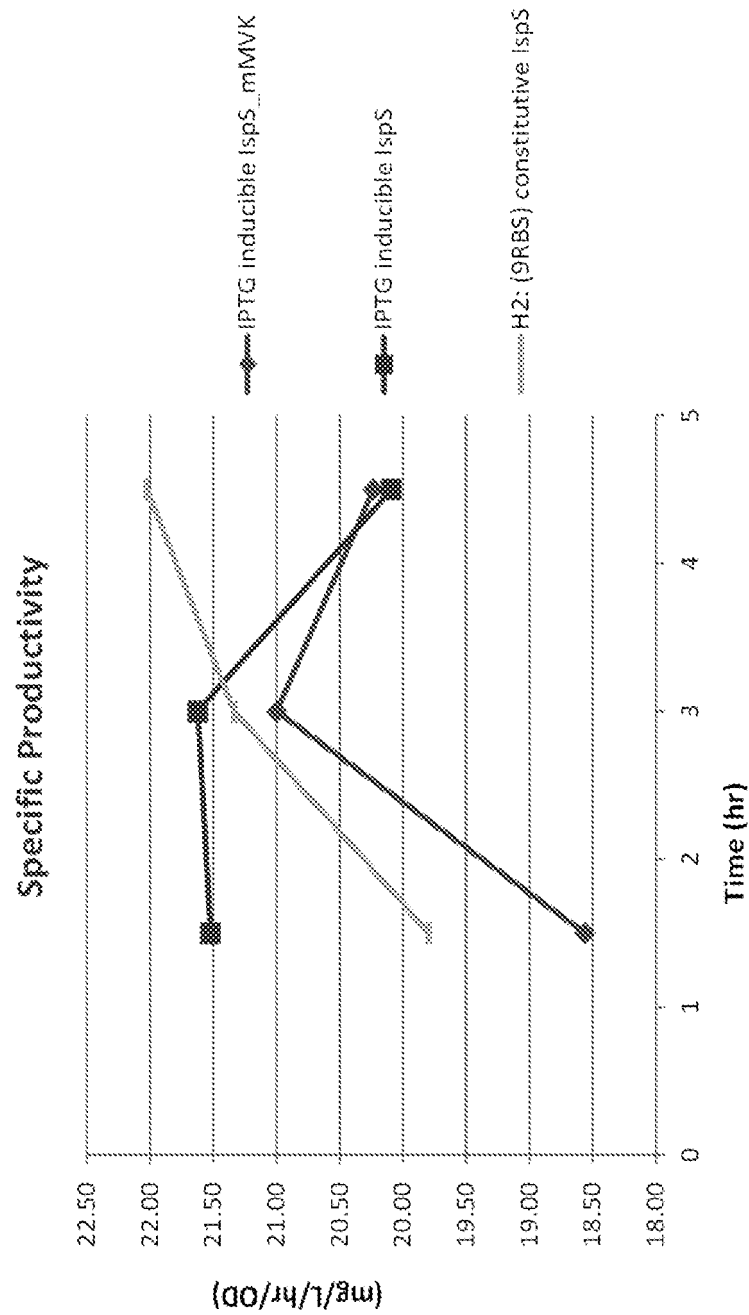


Figure 42