What is claimed is:

1. A genetically engineered microorganism that produces muconic acid from a non-aromatic carbon source comprising at least one exogenous gene encoding for 3,4-dihydroxybenzoic acid decarboxylase and at least one gene that codes for a protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase.

2. The genetically engineered microorganism of claim 1, wherein said genetically engineered microorganism produces at least 60 g/L of muconic acid in 72 hours.

3. The genetically engineered microorganism of claim 1 or claim 2, wherein said genetically engineered microorganism is a bacterium.

4. The genetically engineered microorganism of claim 1, wherein said genetically engineered microorganism is *Escherichia coli.*

5. The genetically engineered microorganism of claim 1, wherein said protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase is a KpdB protein encoded by a *kpdB* gene or a homolog thereof, and wherein said KpdB protein or homolog thereof has at least 25% amino acid identity to said KpdB protein.

6. The genetically engineered microorganism of claim 1, wherein said protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase is a UbiX protein encoded by a *ubiX* gene or a homolog thereof, and wherein said UbiX protein or homolog thereof has at least 25% amino acid identity to said UbiX protein.

7. The genetically engineered microorganism of claim 1, further comprising one or more exogenous genes selected from the group consisting of *aroZ*, *qa-4*, *asbF*, *quiC* and *catAX*.

8. The genetically engineered microorganism of claim 1, further comprising one or more exogenous genes selected from the group consisting of *aroB*, *aroD*, *aroF*, *aroG*, *aroH*, *tktA*, *talB*, *rpe*, and *rpi*, wherein said one or more exogenous genes encode one or more proteins that function in a shikimic acid pathway.

9. The genetically engineered microorganism of claim 1, further comprising at least one exogenous gene encoding a pyruvate carboxylase and a mutation of the phosphoenol pyruvate carboxylase gene.

10. A genetically engineered *Escherichia coli* strain that produces muconic acid from a non-aromatic carbon source comprising at least one exogenous gene encoding for 3,4-dihydroxybenzoic acid decarboxylase and at least one gene that codes for a protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase, wherein said genetically engineered *Escherichia coli* strain produces at least 60 g/L of muconic acid in 72 hours.

11. A genetically engineered *Escherichia coli* strain that produces muconic acid from a non-aromatic carbon source comprising at least one exogenous gene encoding for 3,4-dihydroxybenzoic acid decarboxylase and at least one gene that codes for a protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase, wherein said genetically engineered *Escherichia coli* strain produces at least 80 g/L of muconic acid in 72 hours.

12. The genetically engineered *Escherichia coli* strain of claim 10, wherein said protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase is a KpdB protein encoded by a *kpdB* gene or a homolog thereof, and wherein said KpdB protein or homolog thereof has at least 25% amino acid identity to said KpdB protein.

13. The genetically engineered *Escherichia coli* strain of claim 10, wherein said protein that increases the activity of said 3,4-dihydroxybenzoic acid decarboxylase is a UbiX protein encoded by a *ubiX* gene or a homolog thereof, and wherein said UbiX protein or homolog thereof has at least 25% amino acid identity to said UbiX protein.

14. The genetically engineered *Escherichia coli* strain of claim 10, further comprising one or more exogenous genes selected from the group consisting of *aroZ*, *qa-4*, *asbF*, *quiC* and *catAX*.

15. The genetically engineered *Escherichia coli* strain of claim 10, further comprising at least one exogenous gene encoding a pyruvate carboxylase and a mutation of the phosphoenol pyruvate carboxylase gene.