heterocyclic ring system containing one to two heteroatoms selected from O, S, and N, the fused ring system being unsubstituted or substituted with one to two substituents selected from hydroxy, amino, fluorine, C_{1-4} alkyl, C_{1-4} alkoxy, and trifluoromethyl.

[0015] In some embodiments, the engineered transaminase polypeptide are capable of biocatalytic conversion of compounds of Formula (**II**) to compounds of Formula (**I**) having the indicated stereochemical configuration at the stereogenic center marked with an *; in an enantiomeric excess of at least 70% over the opposite enantiomer.

[0016] In one aspect, there is provided an engineered polypeptide having transaminase activity comprising an amino acid sequence having at least 95% sequence identity to reference sequence of SEQ ID NO:2, an amino acid residue difference as compared to SEQ ID NO:2 at position 126, wherein said amino acid residue at position 126 is alanine, and (a) an amino acid residue difference as compared to SEQ ID NO:2 selected from X33L, X36C, X41C/F/K/M/N/R, X42G, X48D/E/G/K/T, X51K, X54P, X76S, X122F/Q, X148Q, X152T, X155A/I/K/T/V, X156R, X160P, X215G/H/L, X241R, X270T, X273H, X325M; and X241R, or (b) a combination of residue differences selected from: X42G, X54P, X152S, and X155T; X42G, X54P, X152S, X155T, and R164P; X42G, X54P, X150F, X152S, and X155T; X42G, X54P, X150F, X152S, X155T, and X267V; X42G, X54P, X150F, X152S, X155L, W156Q, and C215G; X42G, X54P, X150F, X152S, X155T, X215G, and X267V; X33L; X42G, X54P, X117G; X150F, X152S, X155I, X156Q, and C215G; and X41K, X42G, X54P, X150F, X152S, X155K, X156Q, and C215G; X33L, X42G, X54P, X109S, X150F, X152S, X155K, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155I, X156Q, and X215G; X33L, X42G, X54P, X150F, X152S, X155K, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155L, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155L, X156Q, X215H, and X241R; X41F, X42G, X54P, X122Q, X150F, X152T, X155V, X156Q, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, X171I, X215G, and X241R; X41F, X42G, X54P, X150F, X152S, X155I, X156Q, V171I, and X215G; X41F, X42G, X54P, X150F, X152S, X155I, X156Q, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, X171I, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, and X215G; X42G, X48G, X54P, X150F, X152S, X155L, X156Q, and X215H; X42G, X54P, X60V, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X68A, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X69S, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X122Q, X150F, X152S, X155I, X156Q, X215G, and X241R; X42G, X54P, X122Q, X150F, X152S, X155L, X156Q, X171I, X215G, and X241R; X42G, X54P, X122Q, X150F, X152T, X155V, X156Q, X171I, X215G, and X241R; X42G, X54P, X135I, X136Y, X150F, X152S, X155L,

What is claimed is:

1. An engineered polypeptide having transaminase activity comprising an amino acid sequence having at least 95% sequence identity to reference sequence of SEQ ID NO:2, an amino acid residue difference as compared to SEQ ID NO:2 at position 126, wherein said amino acid residue at position 126 is alanine, and

(a) an amino acid residue difference as compared to SEQ ID NO:2 selected from X33L, X36C, X41C/F/K/M/N/R, X42, X48D/E/G/K/T, X51K, X54, X76S, X122F/Q, X148Q, X152T, X155A/I/K/T/V, X156R, X160P, X215G/H/L, X241R, X270T, X273H, X325M and X241R; or

(b) a combination of residue differences selected from: X42G, X54P, X152S, and X155T; X42G, X54P, X152S, X155T, and R164P; X42G, X54P, X150F, X152S, and X155T; X42G, X54P, X150F, X152S, X155T, and X267V; X42G, X54P, X150F, X152S, X155L, W156Q, and C215G; X42G, X54P, X150F, X152S, X155T, X215G, and X267V; X33L; X42G, X54P, X117G; X150F, X152S, X155I, X156Q, and C215G; X41K, X42G, X54P, X150F, X152S, X155K, X156Q, and C215G; X33L, X42G, X54P, X109S, X150F, X152S, X155K, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155I, X156Q, and X215G; X33L, X42G, X54P, X150F, X152S, X155K, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155L, X156Q, and X215H; X33L, X42G, X54P, X150F, X152S, X155L, X156Q, X215H, and X241R; X41F, X42G, X54P, X122Q, X150F, X152T, X155V, X156Q, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, X171I, X215G, and X241R; X41F, X42G, X54P, X150F, X152S, X155I, X156Q, V171I, and X215G; X41F, X42G, X54P, X150F, X152S, X155I, X156Q, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, X171I, and X215G; X41F, X42G, X54P, X150F, X152S, X155L, X156Q, and X215G; X42G, X48G, X54P, X150F, X152S, X155L, X156Q, and X215H; X42G, X54P, X60V, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X68A, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X69S, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X122Q, X150F, X152S, X155I, X156Q, X215G, and X241R; X42G, X54P, X122Q, X150F, X152S, X155L, X156Q, X171I, X215G, and X241R; X42G, X54P, X122Q, X150F, X152T, X155V, X156Q, X171I, X215G, and X241R; X42G, X54P, X135I, X136Y, X150F, X152S, X155L, X156Q, X192F, and X215G; X42G, X54P, X136I, X150F, X152S, X155L, X156Q, and X215G; X42G, X54P, X136I, X150F, X152S, X155L, X156Q, X215G, and X224I; X42G, X54P, X136I, X150F, X152S, X155L, X156Y, X215G, X282V, and X284I; X42G, X54P, X136I, X150F, X152S, X155L, X156Y, X215G, and X284P; X42G, X54P, X136Y, X150F, X152S, X155L, X156Q, X215G, X282V, and X284P; X42G, X54P, X150F, X152S, X155I, X156Q, X171I, X215G, and X241R; X42G, X54P, X150F, X152S, X155L, X156Q, X193M, and X215G; X42G, X54P, X150F, X152S, X155L, X156Q, X215G, X282V, and X284I; X42G, X54P, X150F, X152S, X155L, X156Q, X215G, and X283S; X42G, X54P, X150F, X152S, X155L, X156Q, X215G, and X284I; X42G, X54P, X150F, X152S, X155L, X156Y, and X215G.