

Supplementary Information for

Local adaptation of *Mycobacterium tuberculosis* on the Tibetan Plateau

This PDF file includes:

Fig. S1-S5

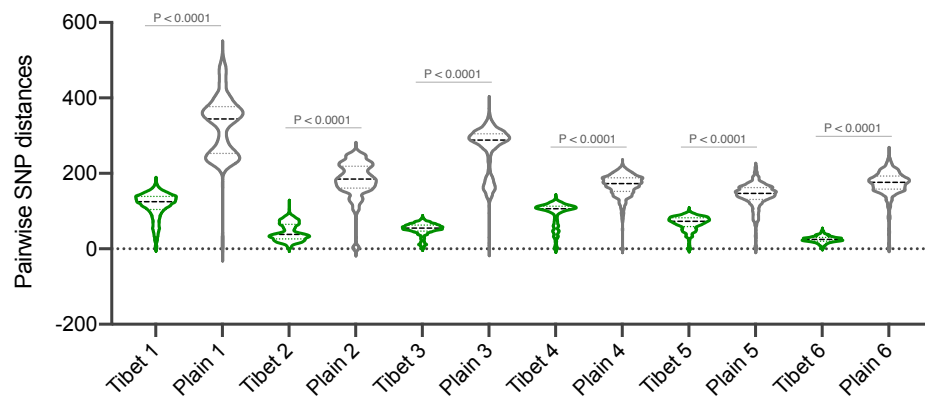


Fig. S1. Within-clade pairwise SNP distances of Tibetan and plains clades. Violin plots show the comparisons of within-clade pairwise SNP distances for paired Tibetan and plains clades. All P values are given by t test.

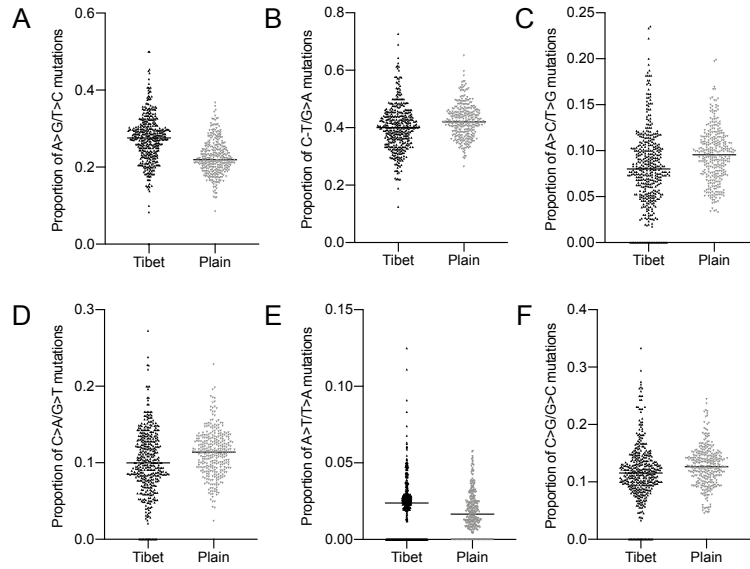


Fig. S2. Comparison of the proportions of six mutation types between Tibetan and Plains strains. A-F, comparisons for A>G/T>C, C>T/G>A, A>C/T>G, C>A/G>T, A>T/T>A and C>G/G>C respectively. P values < 0.0001 for all the six comparisons (t test). In the two comparisons of A>T/T>A and C>G/G>C, Tibetan strains had higher ratio than Plains strains, while Tibetan strains showed lower ratio in the remaining four comparisons.

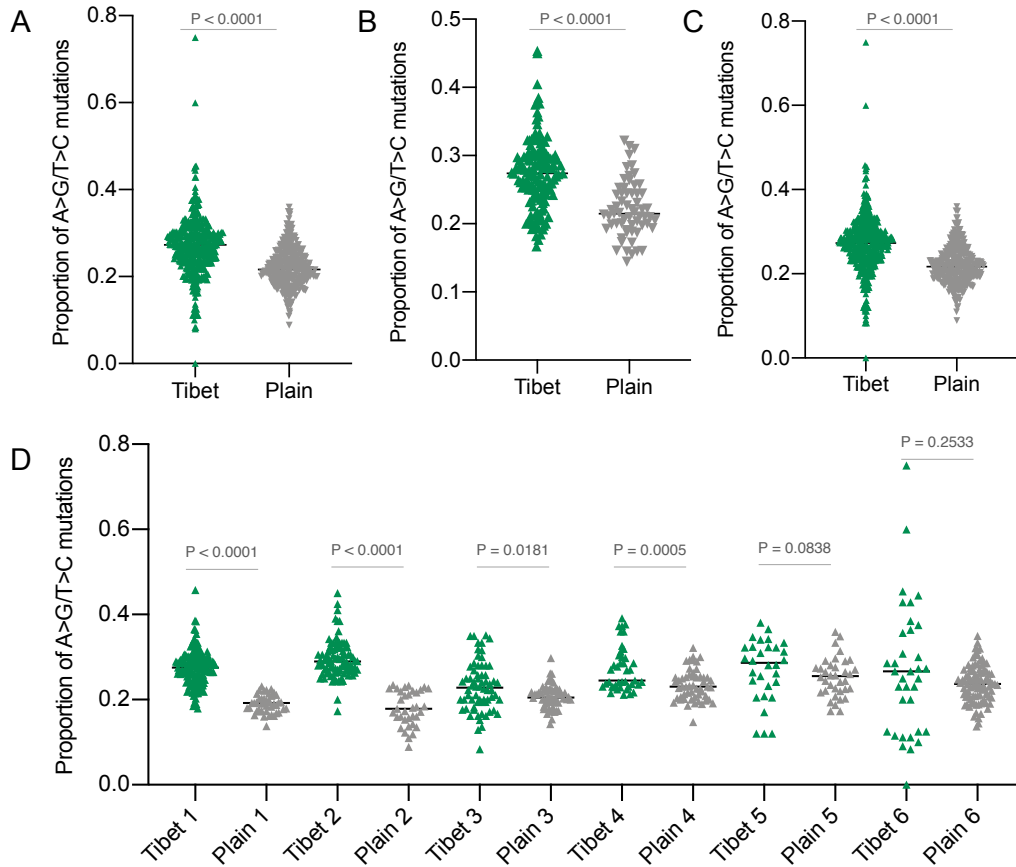


Fig. S3. Comparison of the proportions of A>G/T>C mutation types between Tibetan and plains strains after removing drug-resistant mutations (A) or drug-resistant strains (B) or drug-resistant mutations and mutations presumably under positive selection (C). (D) Paired comparisons of A>G/T>C mutation types between each Tibetan clade and the relative plain clade after removing both drug-resistant mutations and mutations presumably under positive selection. All P values are given by t test.

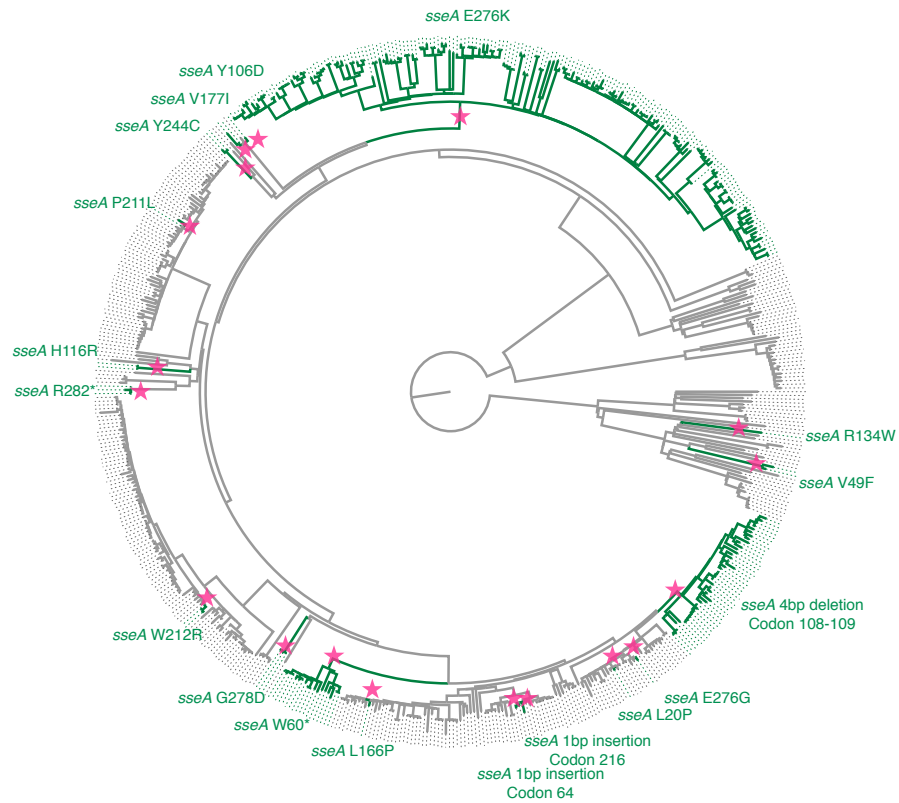


Fig. S4. A phylogenetic tree of Tibetan strains marked with *sseA* mutations. Each pink star represents one mutational event and the exact mutations are shown outside the tree circle. Only mutations that lead to amino acid changes or INDELS are shown in this tree.

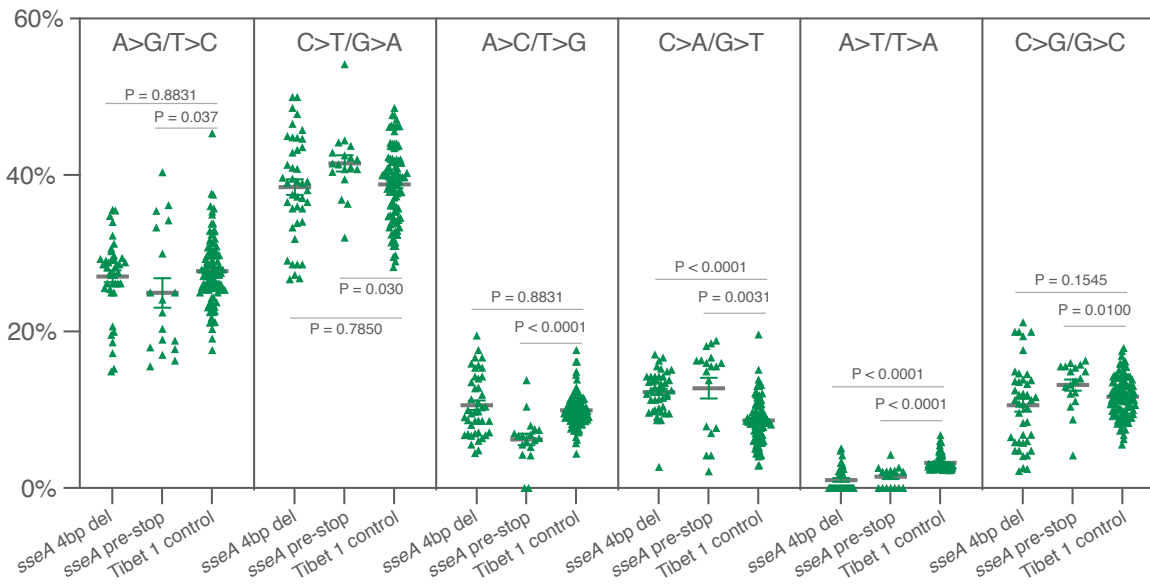


Fig. S5. Comparisons of mutational compositions between three sub-clades within the Tibet 1 clade. “*sseA* 4bp del” refers to the sub-clade with 4bp deletion at codon 108-109 in Fig. 5c, “*sseA* pre-stop” refers to the sub-clade with W60* premature stop mutation, “Tibet 1 control” refers to the remaining strains with no *sseA* mutations in Tibet 1 clade. All the P values are given by t test.