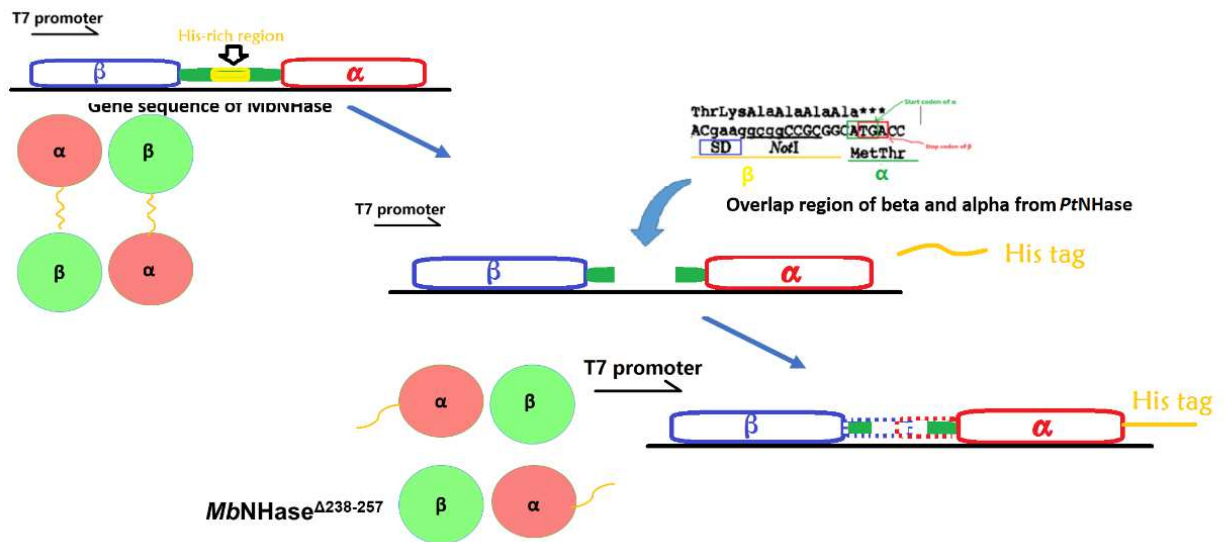


## Supplementary Material

**Figure SI-1.** Gene design for the *MbNHase*<sup>Δ238-257</sup> mutant showing that the α and β-subunit genes overlap by sharing the “TG” based on TGA and ATG requiring on one promoter for the expression of both genes.



**Figure SI-2.** EPR spectrum of a 200  $\mu$ M sample of *MbNHase* in 50 mM HEPES buffer containing 300 mM NaCl, pH 8.0. Signals observed at  $g = 4.3$  (~1500 G) and  $g = 2.0$  (~3400 G) are Fe(III) and Cu(II) impurities within the EPR cavity.

