

Supporting information

Table S1. Primers used in the present study

Name	Sequence	Objective
P1	5'-GGT GGT TGG GAT TCG GCG TTC CCC AAC TCG ATG-3'	Site-directed mutagenesis of D238A
P2	5'-CAT CGA GTT GGG GAA CGC CGA ATC CCA ACC ACC-3'	Site-directed mutagenesis of D238A
P3	5'-GGT GGT TGG GAT TCG AAA TTC CCC AAC TCG ATG-3'	Site-directed mutagenesis of D238K
P4	5'-CAT CGA GTT GGG GAA TTT CGA ATC CCA ACC ACC-3'	Site-directed mutagenesis of D238K
P5	5'-GGT GGT TGG GAT TCG GAA TTC CCC AAC TCG ATG-3'	Site-directed mutagenesis of D238E
P6	5'-CAT CGA GTT GGG GAA TTC CGA ATC CCA ACC ACC-3'	Site-directed mutagenesis of D238E
P7	5'-GGT GGT TGG GAT TCG AAC TTC CCC AAC TCG ATG-3'	Site-directed mutagenesis of D238N
P8	5'-CAT CGA GTT GGG GAA GTT CGA ATC CCA ACC ACC-3'	Site-directed mutagenesis of D238N
P9	5'-GGT GGT TGG GAT TCG GTG TTC CCC AAC TCG ATG-3'	Site-directed mutagenesis of D238V
P10	5'-CAT CGA GTT GGG GAA CAC CGA ATC CCA ACC ACC-3'	Site-directed mutagenesis of D238V
P11	5'-GGT GGT TGG GAT TCG NNS TTC CCC AAC TCG ATG-3'	Saturation mutagenesis of D238
P12	5'-CAT CGA GTT GGG GAA SNN CGA ATC CCA ACC ACC-3'	Saturation mutagenesis of D238

Sequences shown in bold type are mutation points.

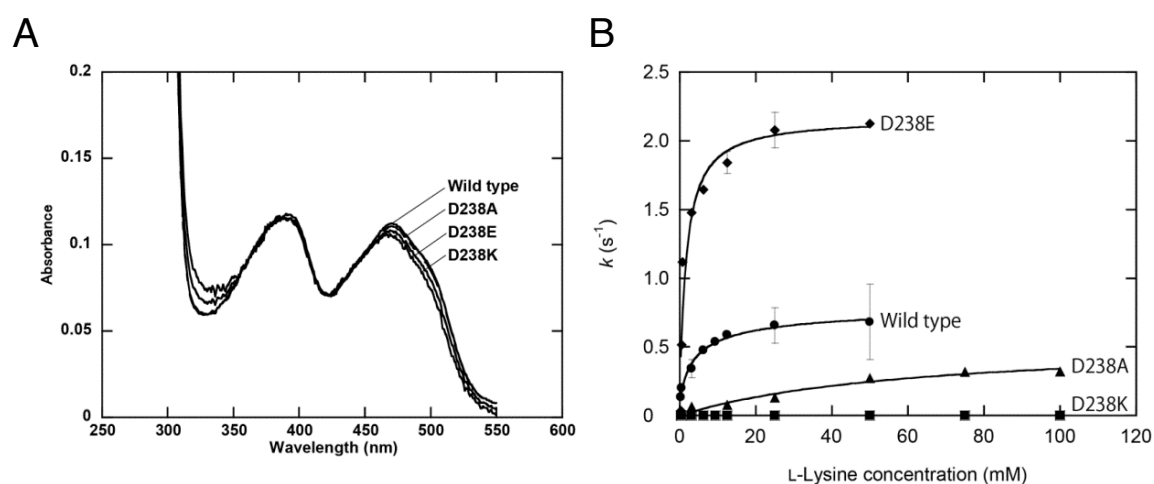


Fig. S1. (A) UV-visible absorbance spectra and kinetics of L-lysine oxidation by the wild-type enzyme (●) and D238A (▲), D238E (◆), and D238K (■) mutants.