

Supplemental Figure 5. Steady-state enzyme kinetics of purified recombinant Ps TyrAT with various substrates at different concentrations. V_{max} and K_{m} values were calculated according to a nonlinear regression of the Michaelis-Menten equation where $V = (V_{\text{max}}S)/(K_{\text{m}}+S)$. Using different concentrations of L-tyrosine (A), L-phenylalanine (B), and L-tryptophan (C) as amino group donors, enzyme activity was determined from the increase in the absorbance of assays monitored at 331, 320, and 328 nm corresponding to 4-hydroxyphenylpyruvate, phenylpyruvate, and indole-3-pyruvate, respectively. Using different concentrations of α -ketoglutarate (D), pyruvate (E), or oxaloacetate (F) as amino group acceptors, enzyme activity was determined by measuring an increase in absorbance at 331 nm resulting from the transamination of L-tyrosine to 4-hydroxyphenylpyruvate. Molar extinction coefficients were used to calculate the quantity of each reaction product. Incubation time and protein concentration were optimized prior to enzyme kinetic analyses. Values represent the mean specific activity \pm standard deviation monitored as a function of substrate concentration for three independent replicates.