**Supplementary File 10**: *Chi-squared test* comparing early versus late residue composition across all coenzyme temporalities in different interaction types.

|  |  |
| --- | --- |
| Interaction type | Statistics |
| Backbone | p-value = 0.01249, chi-square = 10.9, degrees of freedom = 3, critical value = 7.81 |
| Backbone & Side chain | p-value = 0.02875, chi-square = 9.04, degrees of freedom = 3, critical value = 7.81 |
| Side chain | p-value = 3.19E-26, chi-square =121.78, degrees of freedom = 3, critical value = 7.81 |