**Supplementary Table 1. Data collection and refinement statistics for H60A mutant of Csx3 in complex with cA4.**

|  |  |
| --- | --- |
|  | Csx3 H60A mutant + cA4 |
| Data collection |  |
| Space group | C 1 2 1 |
| Cell dimensions |  |
|  *a*, *b*, *c* (Å) | 194.0, 60.4, 107.1 |
|  a, b, l (°) | 90, 116.5, 90 |
| Resolution (Å) | 53.56 – 1.84 (1.87 – 1.84)\* |
| *R*sym or *R*merge | 0.04 (0.72) |
| *I* / s*I* | 11.3 (1.1) |
| Completeness (%) | 96.9 (70.0) |
| Redundancy | 3.2 (2.4) |
|  |  |
| Refinement |  |
| Resolution (Å) | 53.56 – 1.84 |
| No. reflections | 88795 |
| *R*work / *R*free | 0.20 / 0.24 |
| No. atoms | 8639 |
|  Protein | 7621 |
|  Ligand/ion | 578 |
|  Water | 440 |
| *B*-factors |  |
|  Protein | 37.0 |
|  Ligand/ion | 43.4 |
|  Water | 38.00 |
| R.M.S. deviations |  |
|  Bond lengths (Å) | 0.016 |
|  Bond angles (°) | 1.76 |

\* Values in parentheses are for the high resolution shell.