Table S2. Data collection and refinement statistics. Statistics for the highest-resolution shell are shown in parentheses. The table was generated with phenix.table_one.

**Data collection**

| Parameter               | Value                     |
|-------------------------|---------------------------|
| Wavelength              | 0.9763                    |
| Resolution range        | 48.31-2.8 (2.9-2.8)       |
| Space group             | P 21 21 2                 |
| Unit cell               | 255.31 64.88 144.72       |
| Total reflections       | 816285 (83194)            |
| Unique reflections      | 60284 (5282)              |
|Multiplicity            | 13.5 (14.1)               |
|Completeness (%)         | 98.61 (89.10)             |
|Mean I/sigma(I)          | 11.74 (0.73)              |
|Wilson B-factor          | 83.24                     |
|R-sym                    | 0.2238 (2.725)            |
|CC$_{1/2}$               | 0.998 (0.495)             |

**Refinement**

| Parameter                              | Value                     |
|----------------------------------------|---------------------------|
|Reflections used in refinement         | 59480 (5272)              |
|Reflections used for R-free            | 1471 (135)                |
|R-work                                 | 0.2359 (0.3593)           |
|R-free                                 | 0.2742 (0.4072)           |
|Number of non-hydrogen atoms           | 13155                     |
|RMS(bonds)                             | 0.004                     |
|RMS(angles)                            | 0.74                      |
|Ramachandran favored (%)               | 96.62                     |
|Ramachandran allowed (%)               | 3.32                      |
|Ramachandran outliers (%)              | 0.06                      |
|Rotamer outliers (%)                   | 2.06                      |
|Clashscore                             | 2.21                      |
|Average B-factor ($\text{Å}^2$)        | 111.13                    |