

Table 5. Data collection and refinement statistics for UPPS-bisphosphonate crystals

| Crystals | BPH-629 | BPH-608 | BPH-628 | BPH-675 | BPH-676 |
|----------------------------------|---|---|---|---|---|
| Data collection | | | | | |
| Space group | P2 ₁ 2 ₁ 2 ₁ | P2 ₁ 2 ₁ 2 ₁ | P2 ₁ 2 ₁ 2 ₁ | P2 ₁ 2 ₁ 2 ₁ | P2 ₁ 2 ₁ 2 ₁ |
| Resolution, Å* | 30-1.9 (1.97-1.9) | 30-2.0 (2.07-2.0) | 30-2.1 (2.18-2.1) | 30-2.05 (2.12-2.05) | 30-2.5 (2.59-2.5) |
| Unit cell dimensions | | | | | |
| <i>a</i> , Å | 64.02 | 64.29 | 63.68 | 63.54 | 62.97 |
| <i>b</i> , Å | 66.23 | 68.16 | 68.16 | 68.69 | 68.29 |
| <i>c</i> , Å | 111.28 | 109.91 | 109.89 | 110.03 | 110.23 |
| No. of reflections | | | | | |
| Observed | 366,529 (35668) | 263,413 (26463) | 163,527 (15367) | 222,476 (22555) | 130,566 (13415) |
| Unique | 39,256 (3877) | 33,217 (3267) | 28,571 (2794) | 30,788 (3048) | 16,798 (1639) |
| Completeness, % | 99.8 (100) | 99.9 (100) | 99.5 (99.1) | 99.7 (100) | 97.3 (97.1) |
| <i>R</i> _{merge} , % | 5.2 (44.4) | 5.8 (46.4) | 4.6 (47.0) | 4.5 (44.6) | 5.8 (41.3) |
| <i>I</i> / σ (<i>I</i>) | 38.2 (5.5) | 36.6 (5.0) | 34.2 (3.6) | 39.9 (4.6) | 41.8 (6.3) |
| Refinement | | | | | |
| No. of reflections | 38,115 (3559) | 32,558 (2969) | 27,661 (2536) | 30,143 (2782) | 16,326 (1538) |
| <i>R</i> _{work} , % | 18.7 (20.7) | 19.1 (21.3) | 20.0 (25.5) | 20.9 (26.7) | 22.4 (29.7) |
| <i>R</i> _{free} , % | 23.6 (24.4) | 23.8 (27.4) | 24.2 (30.7) | 24.8 (30.5) | 28.4 (40.3) |
| Geometry deviations | | | | | |
| Bond lengths, Å | 0.019 | 0.017 | 0.015 | 0.015 | 0.016 |
| Bond angles, ° | 1.8 | 1.6 | 1.6 | 1.7 | 1.7 |
| No. of all protein atoms | 3,535 | 3,545 | 3,443 | 3,345 | 3,470 |
| Mean B-values, Å ² | 33.1 | 36.3 | 47.1 | 44.1 | 53.5 |
| No. of all cofactor atoms | 192 | 145 | 68 | 121 | 90 |
| Mean B-values, Å ² | 44.6 | 51.1 | 77.1 | 89.3 | 85.0 |
| No. of water molecules | 458 | 270 | 310 | 301 | 206 |
| Mean B-values, Å ² | 54.1 | 48.7 | 59.3 | 58.1 | 58.6 |
| Ramachandran plot, % | | | | | |
| Most favored | 96.0 | 94.7 | 93.0 | 93.6 | 92.0 |
| Additionally allowed | 4.0 | 5.3 | 7.0 | 6.4 | 8.0 |
| Generously allowed | 0 | 0 | 0 | 0 | 0 |

*Values in parentheses are for the highest-resolution shells.