

**Table 2. Summary of HDAC8 diffraction data and refinement statistics**

X-ray diffraction data	
Data type	Native2
Space group	$P2_1$
Cell constants, Å	
<i>a</i>	51.746
<i>b</i>	83.532
<i>c</i>	94.653
$\beta$	97.485
Wavelength	0.9340
Resolution, Å*	50–2.5 (2.65–2.50)
$R_{\text{sym}}$ , † %	6.3 (44.9)
$\langle I/\sigma I \rangle$ ‡	9.2 (1.3)
Number of observations	184,029
Number of unique observations	27,172
Completeness, %	98.1 (98.7)
Refinement statistics	
Resolution, Å	50–2.5
<i>R</i> factor§	0.21
$R_{\text{free}}$ ¶	0.25
rmsd ¶¶ bond lengths, Å	0.007
rmsd bond angles, Å	1.413
Overall B-factor, Å <sup>2</sup>	42.32
$\phi\psi$ angle distribution**	
In core region	513 (85.5)
In allowed region	87 (14.5)
In disallowed region	0 (0)
Number of atoms	
Protein	5,478
Inhibitor	52

Ions	6
Solvent	280

\*Highest resolution of the data set with the highest-resolution bin in parentheses.

<sup>†</sup> $R_{\text{sym}} = \sum_h \sum_i | \langle I_h \rangle - I_i(h) | / \sum_h \sum_i I_i(h)$ , where  $I_i(h)$  is the mean intensity of the  $N$  reflection.

<sup>‡</sup>Mean ( $I$ )/SD.

<sup>§</sup> $R$  factor =  $\sum_h |F_o - F_c| / \sum_h |F_o|$ .

<sup>¶</sup> $R_{\text{free}}$  is calculated from 5% of the data that were omitted during the course of the refinement.

<sup>||</sup> From ideal geometry.

\*\*As defined by PROCHECK (8), the percentage distribution is given in parentheses.