

Table 2. Hot-spot * residues of selected robust modes of *Thermus aquaticus* DNA polymerase I

Mode # †	Residue numbers
4	461, 464, 516, 532, 533, 537, 538, 541, 545, 570, 571, 590, 591, 610, 611, 612, 613, <u>614</u> ‡, 615, 616, 617, 619, 622, <u>626</u> , 632, 638, <u>666</u> , <u>667</u> , <u>669</u> , <u>670</u> , 672, 697, 720, 721, 723, 725, 747, 749, 754, 785, 809, 810, 812, 813, 814
7	463, 464, 468, 506, 514, 515, 516, 532, 533, 537, 538, 541, 542, 545, 546, 584, 590, 591, 613, 615, 616, 617, 632, 637, 638, <u>662</u> , <u>664</u> , 665, <u>666</u> , <u>667</u> , 668, 672, 673, 692, 697, 745, 783, 816, 817, 818, 819, 820, 832
10	613, 627, 628, 638, 642, 643, 655, <u>659</u> , <u>660</u> , <u>663</u> , <u>664</u> , <u>667</u> , <u>669</u> , <u>670</u> , 671, 672, 673, 675, <u>690</u> , 693, 694, 695, 696, 699, 700, 704, <u>707</u> , <u>708</u> , 711, 727, 728, 729, 730, 731, 732, 733, 734, 737, 740, 741, 742, 743, 744, 745, 747, 748

* The hot-spot residues that introduce most significant site-specific perturbation have high- $\delta\omega$ values. The details of the calculations are given in ref. 1.

† These modes describe allosteric transitions and are also robust to sequence variations.

‡ Residues in bold have already been experimentally identified to be significant.

1. Zheng, W., Brooks, B. R., Doniach, S. & Thirumalai, D. (2005) *Structure (London)* **13**, 565-577.