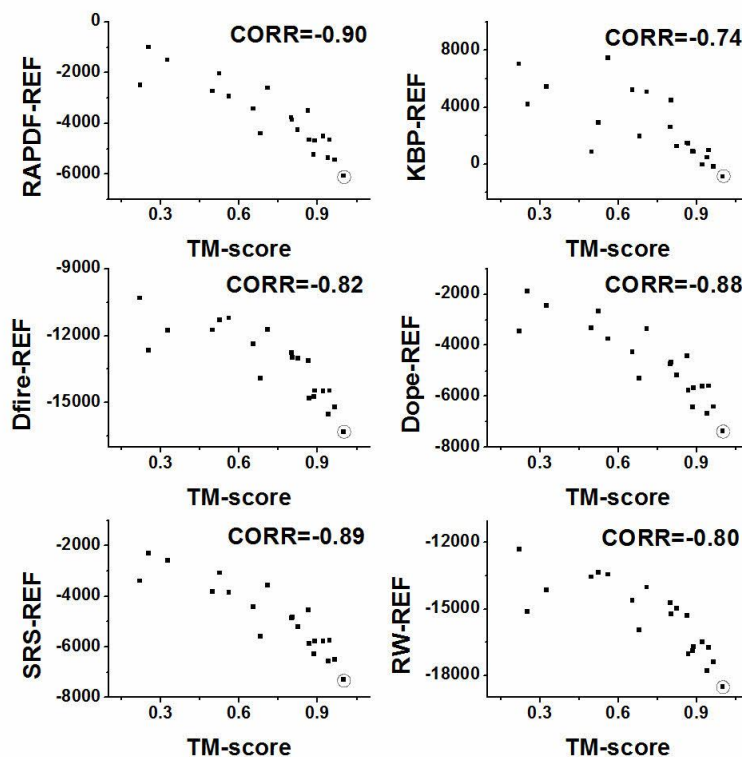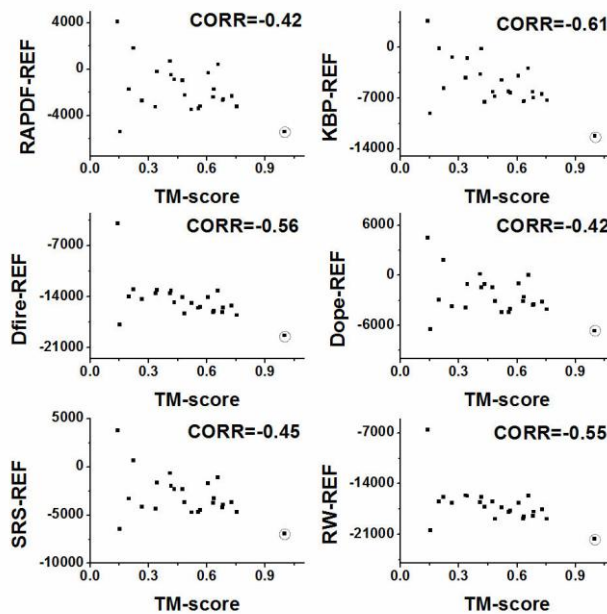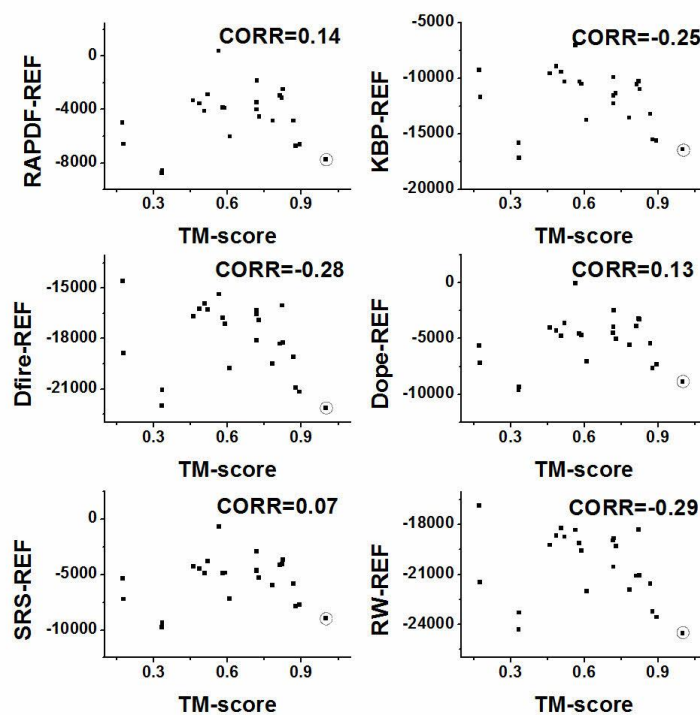# Supporting Materials

Figure S1. Atomic potentials versus TM-score for structural decoys of Target T0137 in the CASP decoy set. The native structure is highlighted by the open circles.

Figure S2. Atomic potentials versus TM-score for structural decoys of Target T0211 in the CASP decoy set. The native structure is highlighted by the open circles.
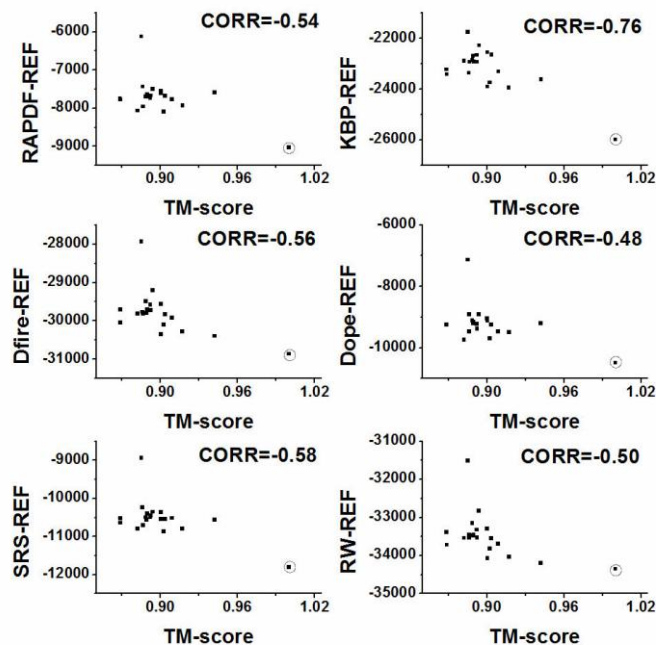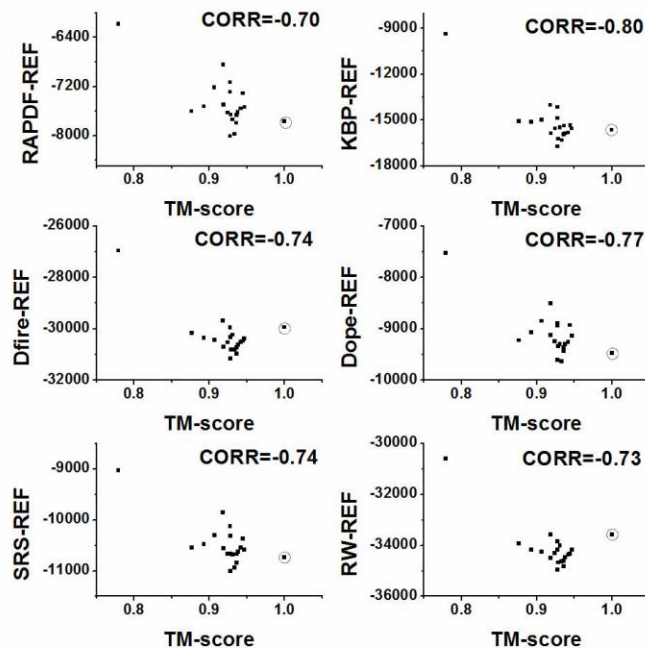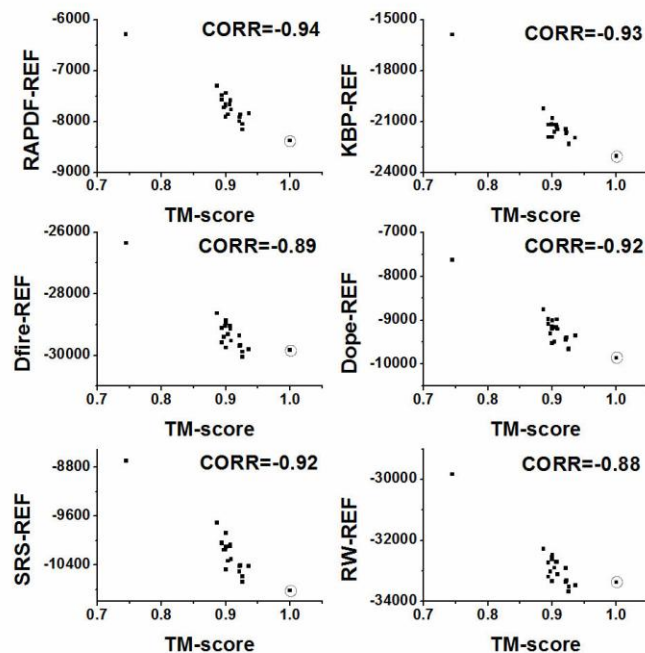
Figure S3. Atomic potentials versus TM-score for structural decoys of Target T0423 in the CASP decoy set. The native structure is highlighted by the open circles.
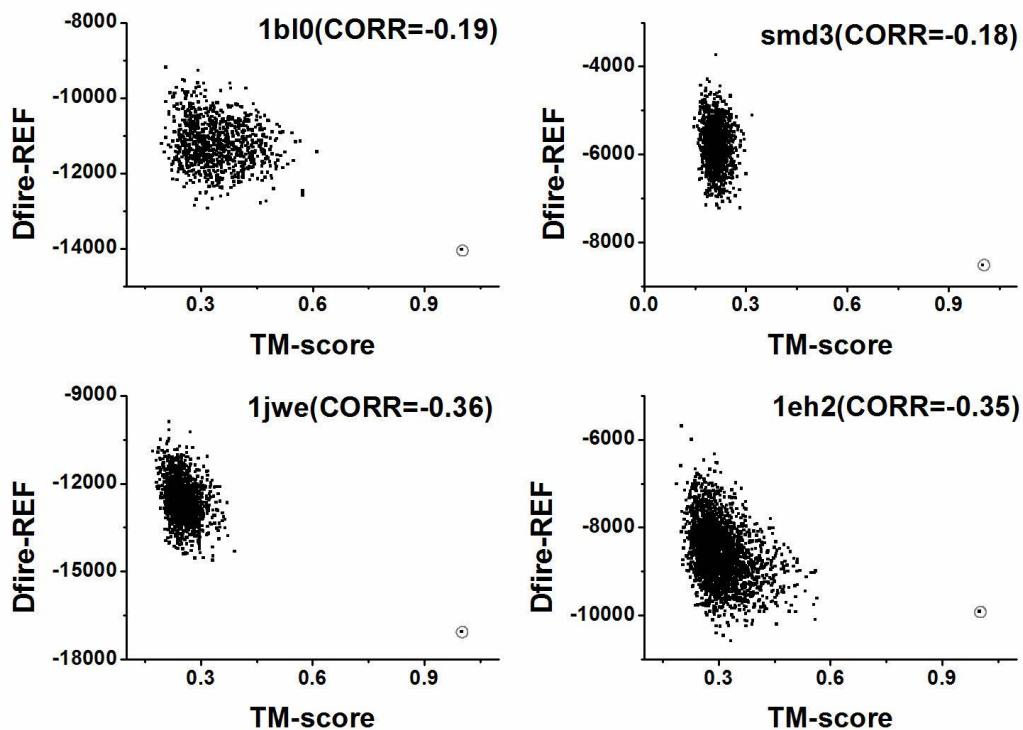

Figure S4. Atomic potentials versus TM-score for structural decoys of 1mfa in the *ig_structal_hires* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S5. Atomic potentials versus TM-score for structural decoys of 1vge in the *ig_structal_hires* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S6. Atomic potentials versus TM-score for structural decoys of 7fab in the *ig_structal_hires* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
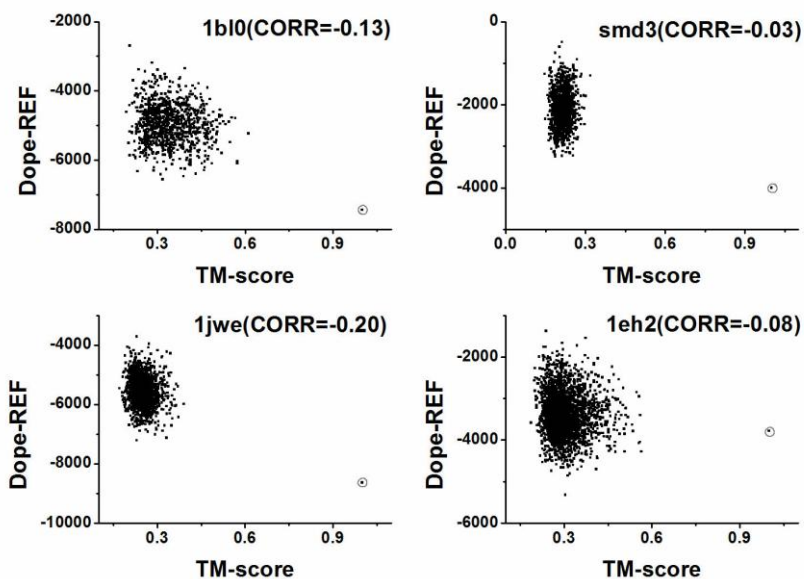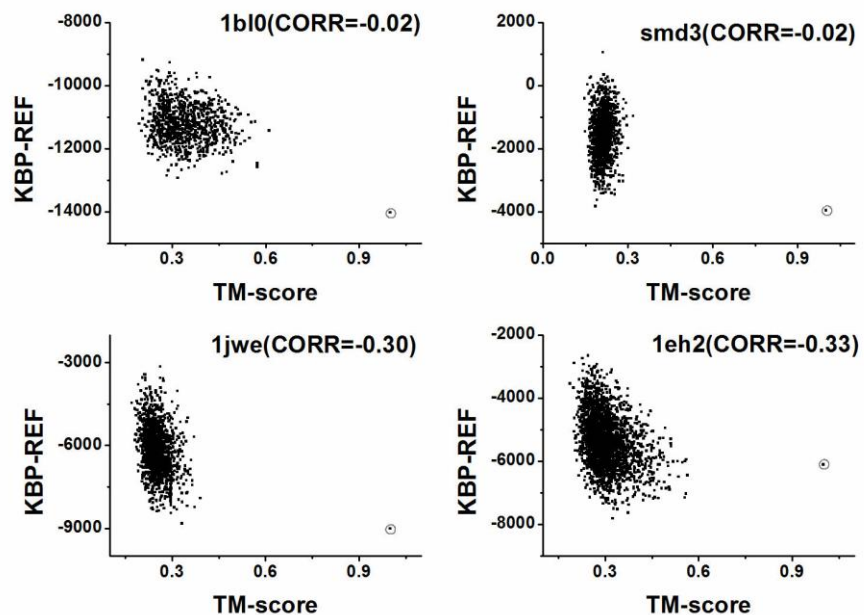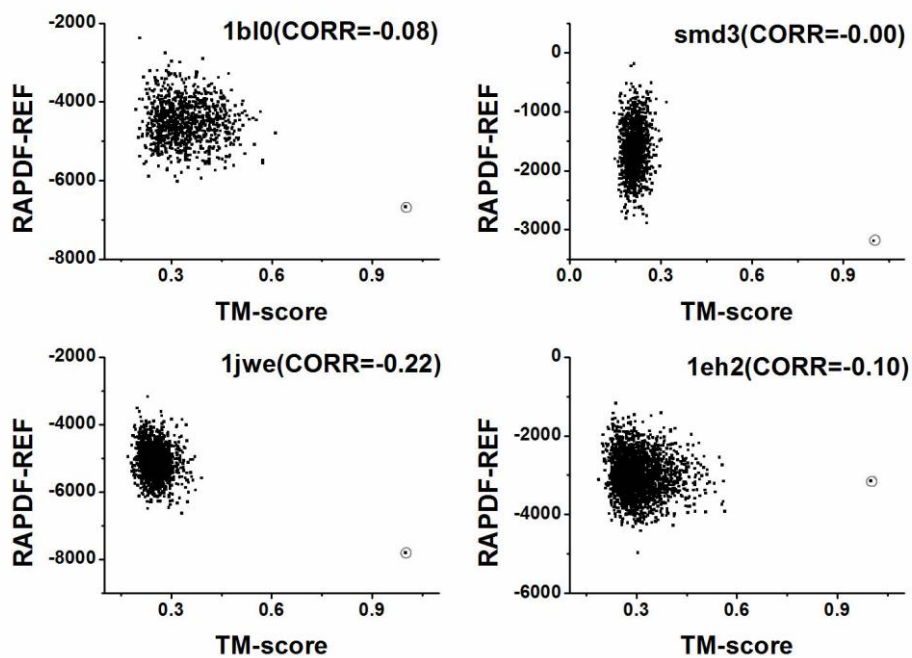
Figure S7. Dfire potentials versus TM-score for four representative targets (1bl0, smd3, 1jwe and 1eh2) in the *fisa_casp3* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S8. Dope potentials versus TM-score for four representative targets (1bl0, smd3, 1jwe and 1eh2) in the *fisa_casp3* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S9. KBP potentials versus TM-score for four representative targets (1bl0, smd3, 1jwe and 1eh2) in the *fisa_casp3* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
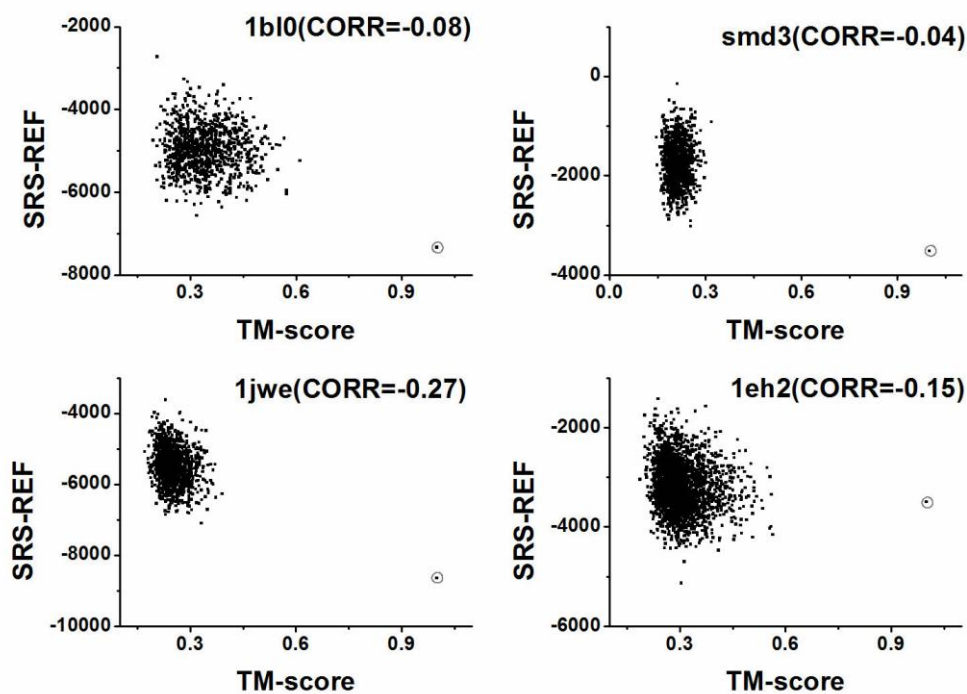

Figure S10. RAPDF potentials versus TM-score for four representative targets (1bl0, smd3, 1jwe and 1eh2) in the *fisa_casp3* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
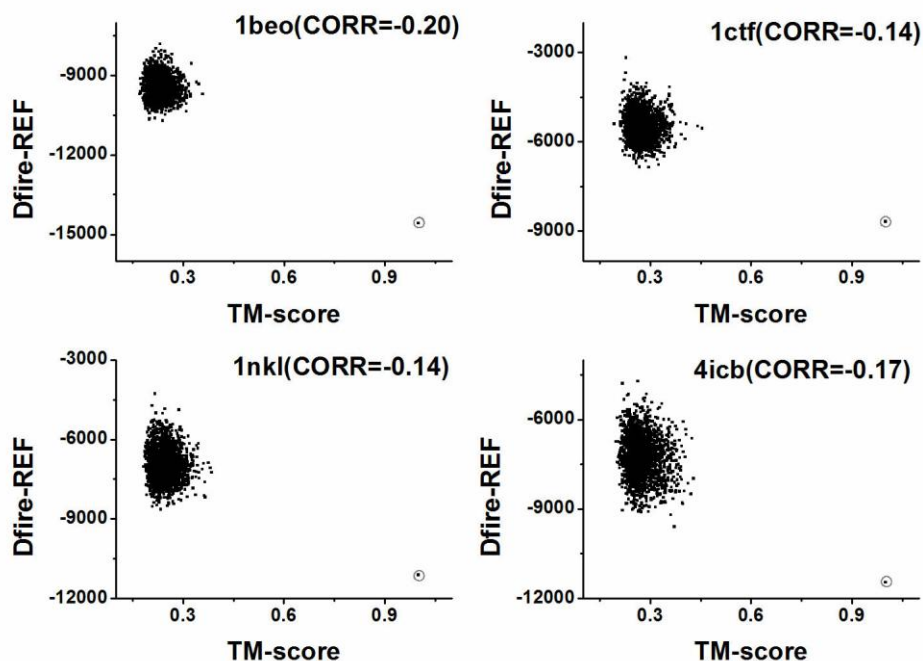
Figure S11. SRS potentials versus TM-score for four representative targets (1bl0, smd3, 1jwe and 1eh2) in the *fisa_casp3* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
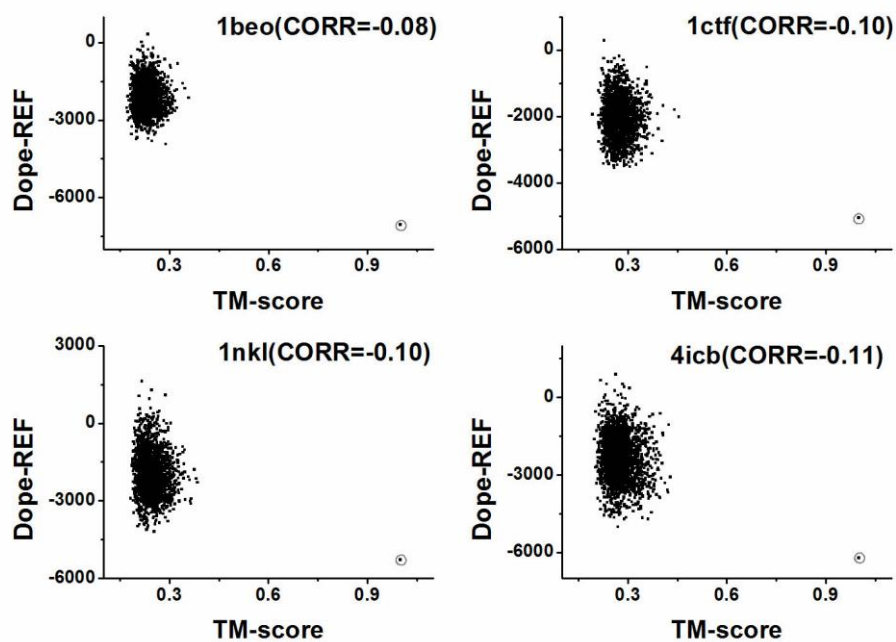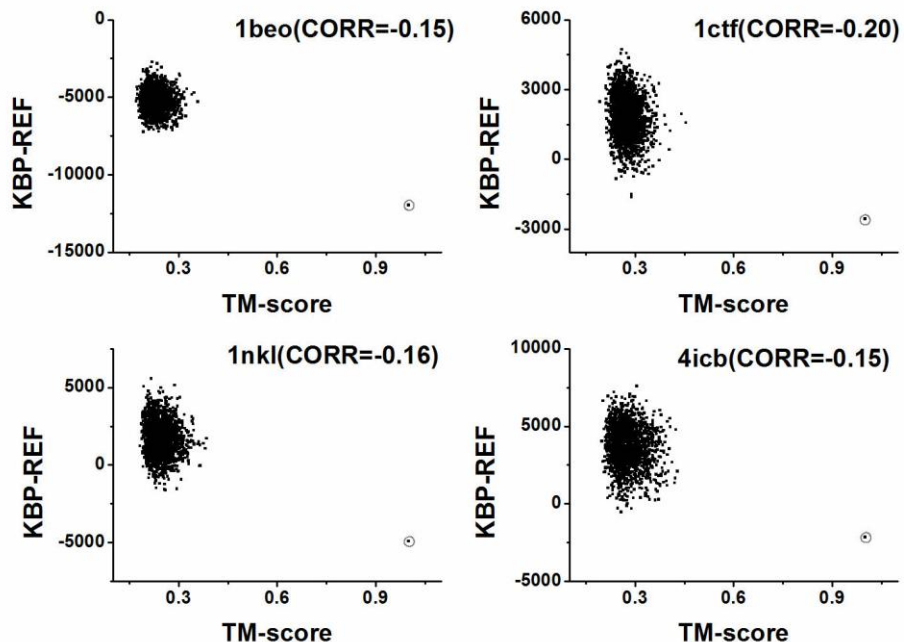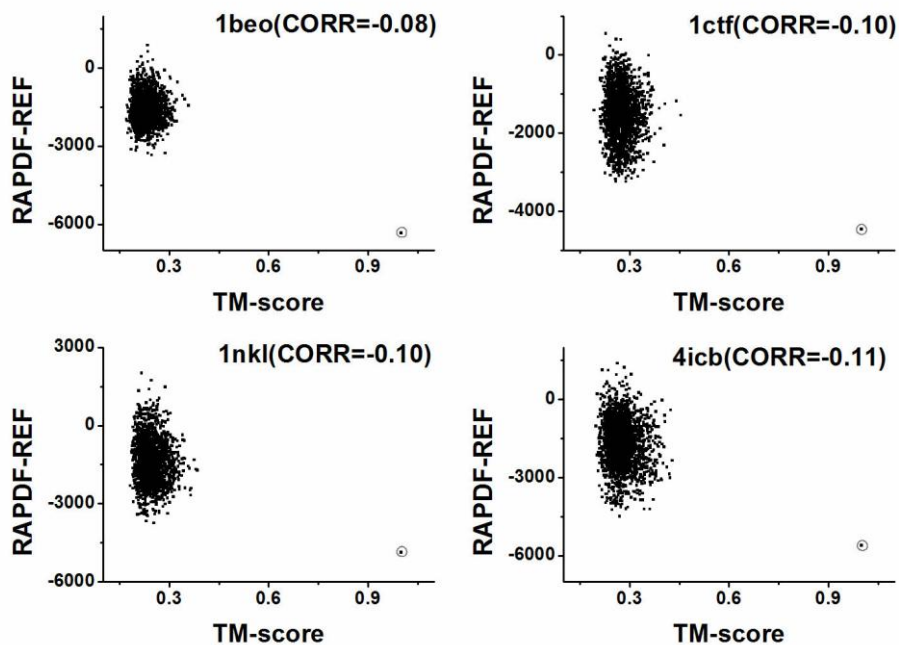

Figure S12. Dfire potentials versus TM-score for four representative targets (1beo, 1ctf, 1nkl and 4icb) in the *lattice_ssfit* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S13. Dope potentials versus TM-score for four representative targets (1beo, 1ctf, 1nkl and 4icb) in the *lattice_ssfit* of the 'R' Us decoy set. The native structure is highlighted by the open circles.

Figure S14. KBP potentials versus TM-score for four representative targets (1beo, 1ctf, 1nkl and 4icb) in the *lattice_ssfit* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
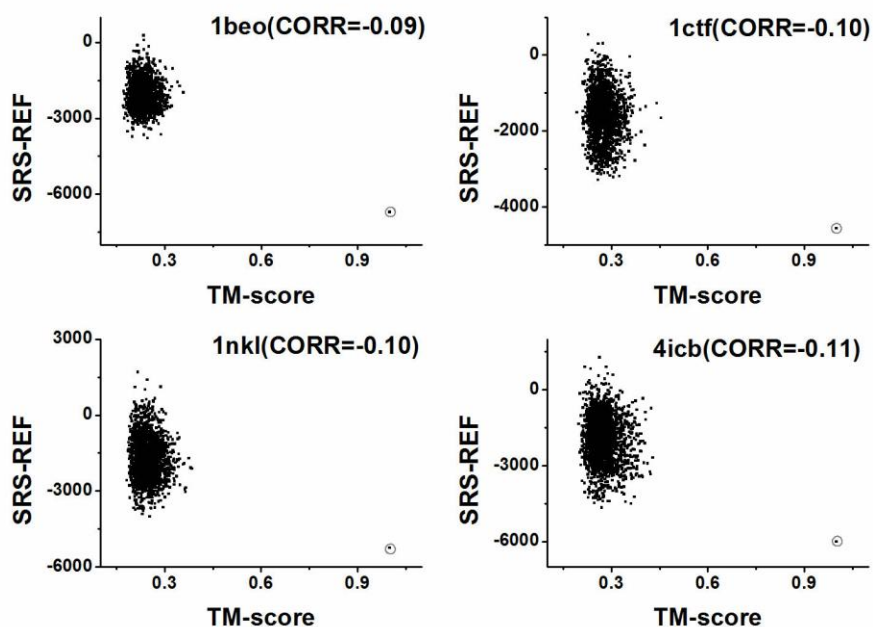
Figure S15. RAPDF potentials versus TM-score for four representative targets (1beo, 1ctf, 1nkl and 4icb) in the *lattice_ssfit* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
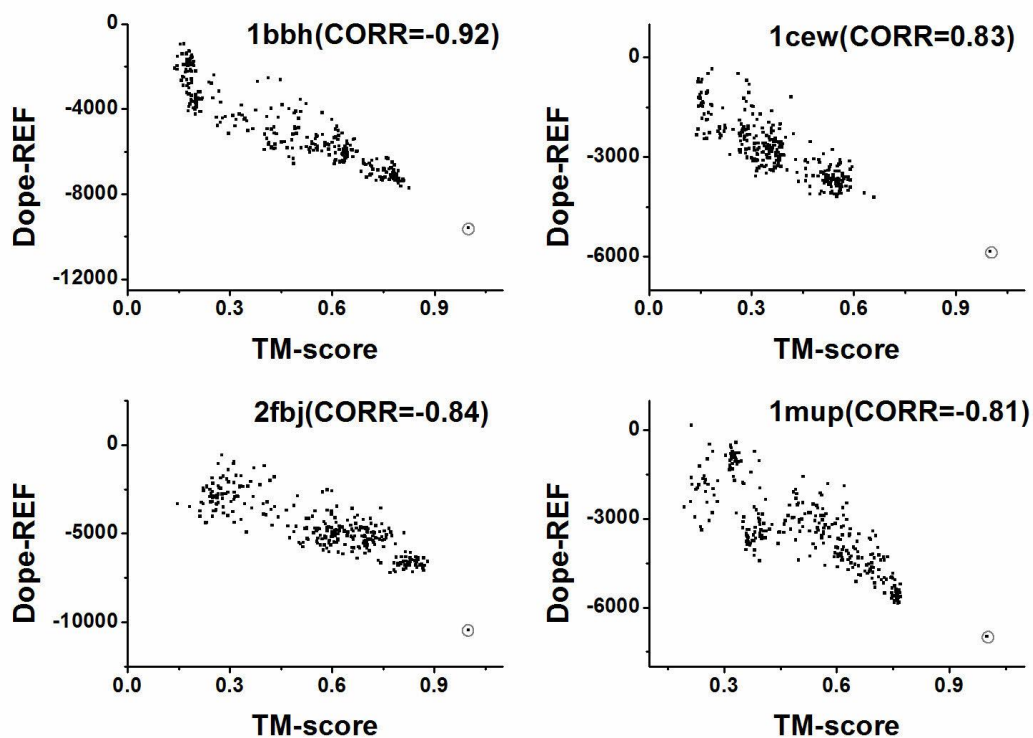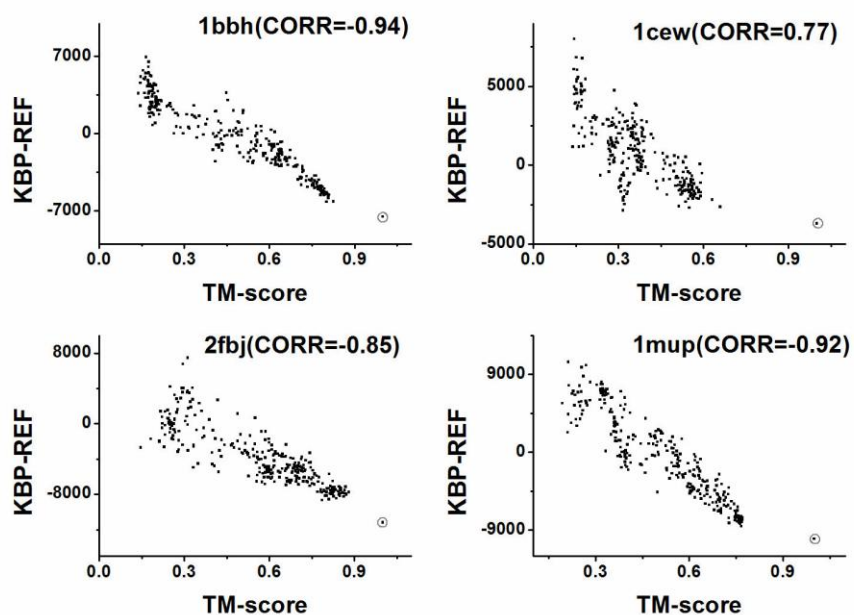

Figure S16. RAPDF potentials versus TM-score for four representative targets (1beo, 1ctf, 1nkl and 4icb) in the *lattice_ssfit* of the 'R' Us decoy set. The native structure is highlighted by the open circles.
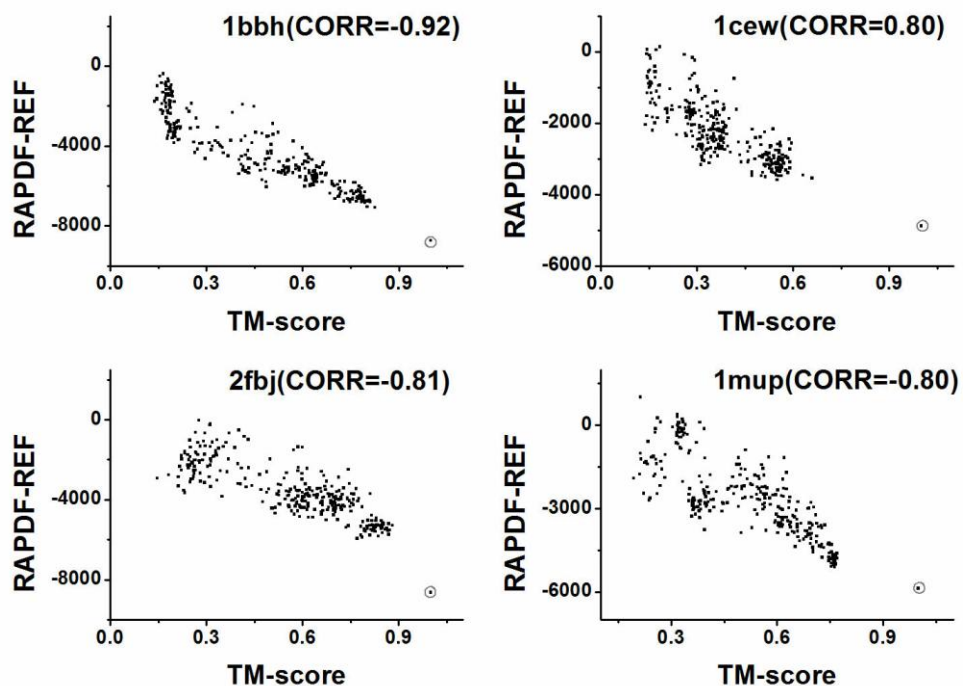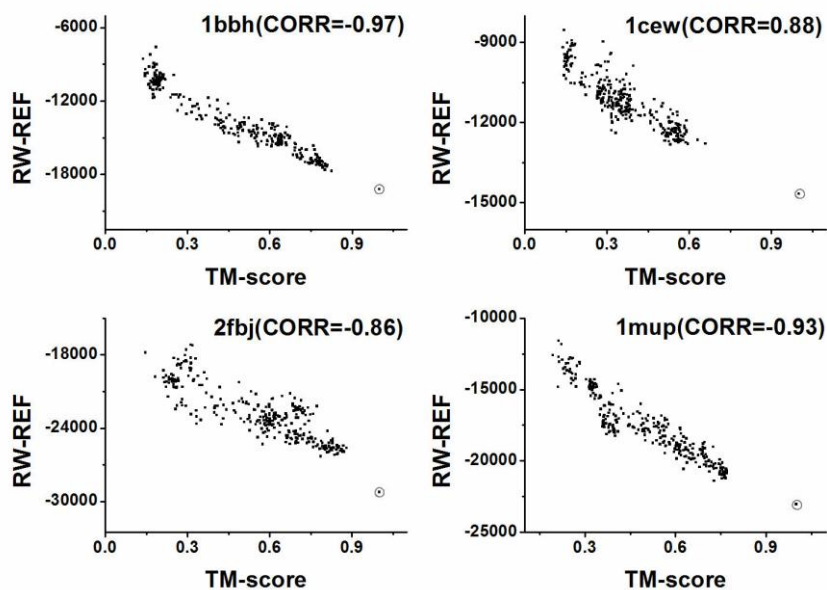
Figure S17. Dope potentials versus TM-score for four representative targets (1bbh, 1cew, 2fbj and 1mup) in the MOULDER decoy set. The native structure is highlighted by the open circles.

Figure S18. KBP potentials versus TM-score for four representative targets (1bbh, 1cew, 2fbj and 1mup) in the MOULDER decoy set. The native structure is highlighted by the open circles.

Figure S19. RAPDF potentials versus TM-score for four representative targets (1bbh, 1cew, 2fbj and 1mup) in the MOULDER decoy set. The native structure is highlighted by the open circles.
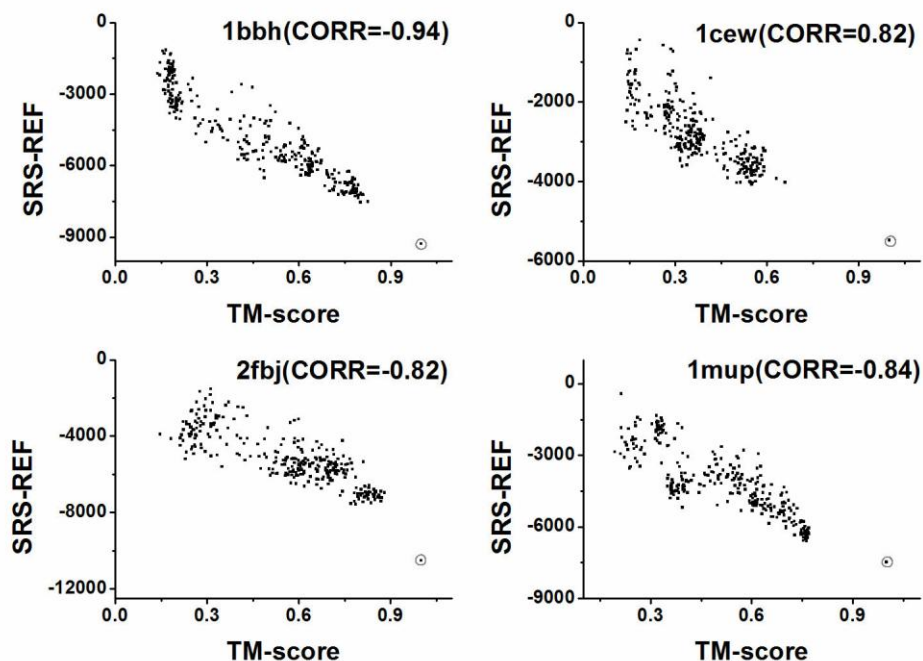

Figure S20. RW potentials versus TM-score for four representative targets (1bbh, 1cew, 2fbj and 1mup) in the MOULDER decoy set. The native structure is highlighted by the open circles.
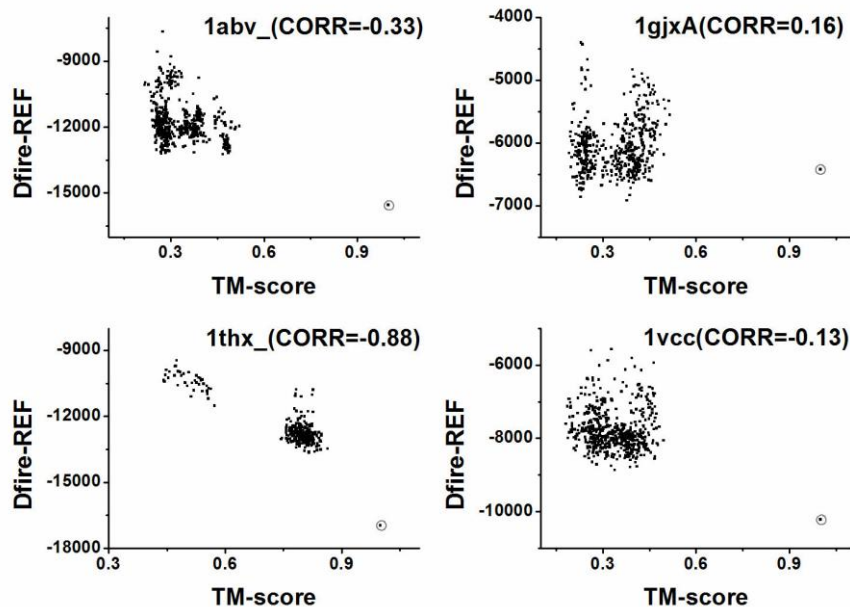
Figure S21. SRS potentials versus TM-score for four representative targets (1bbh, 1cew, 2fbj and 1mup) in the MOULDER decoy set. The native structure is highlighted by the open circles.
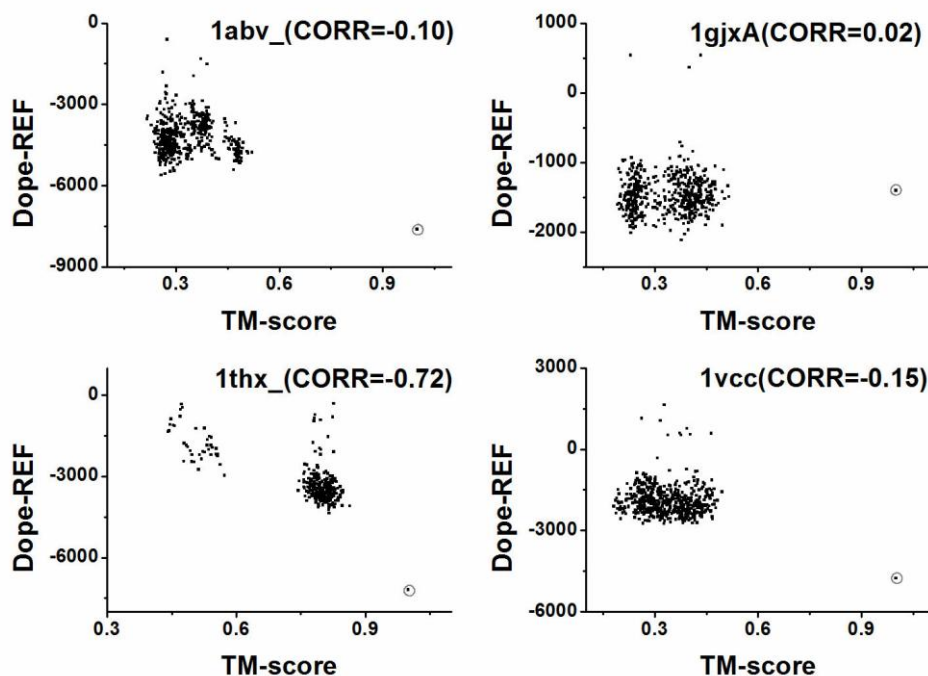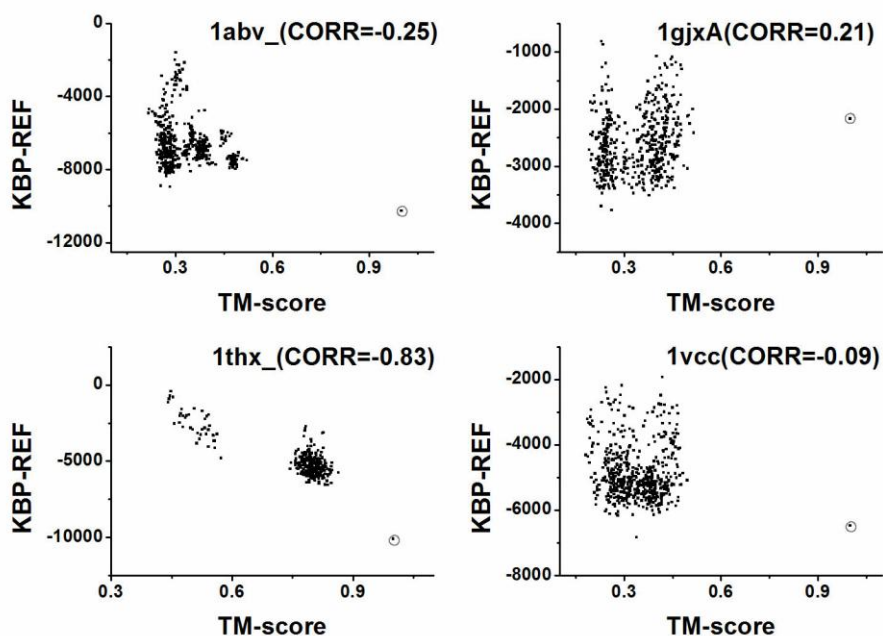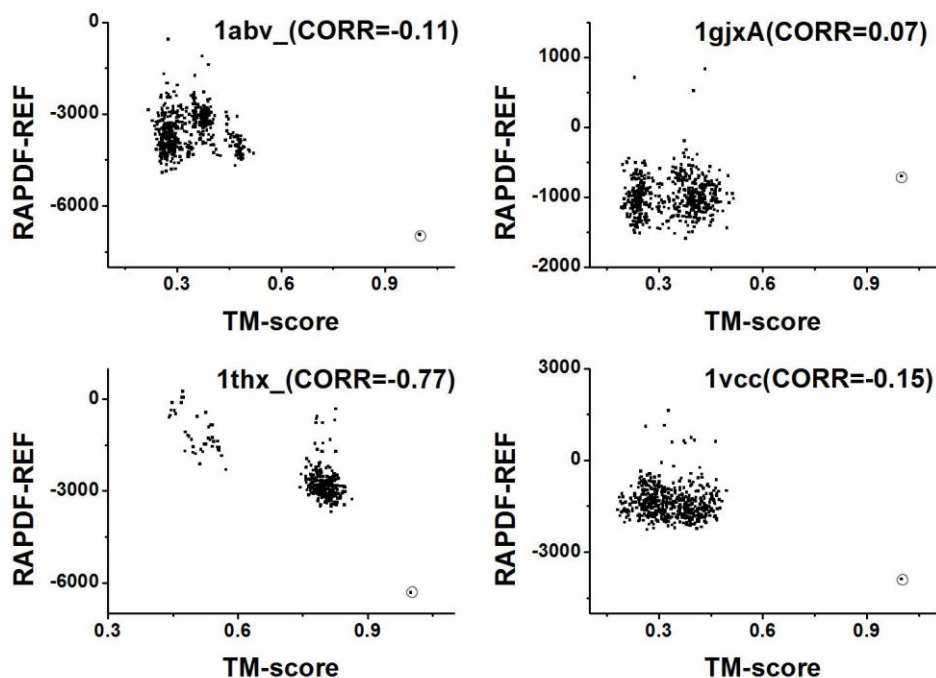

Figure S22. Difire potentials versus TM-score for four representative targets (1abv_, 1gjxA, 1thx_ and 1vcc_) in the I-TASSER decoy set. The native structure is highlighted by the open circles.

Figure S23. Dope potentials versus TM-score for four representative targets (1abv_, 1gjxA, 1thx_ and 1vcc_) in the I-TASSER decoy set. The native structure is highlighted by the open circles.

Figure S24. KBP potentials versus TM-score for four representative targets (1abv_, 1gjxA, 1thx_ and 1vcc_) in the I-TASSER decoy set. The native structure is highlighted by the open circles.

Figure S25. RAPDF potentials versus TM-score for four representative targets (1abv_, 1gjxA, 1thx_ and 1vcc_) in the I-TASSER decoy set. The native structure is highlighted by the open circles.
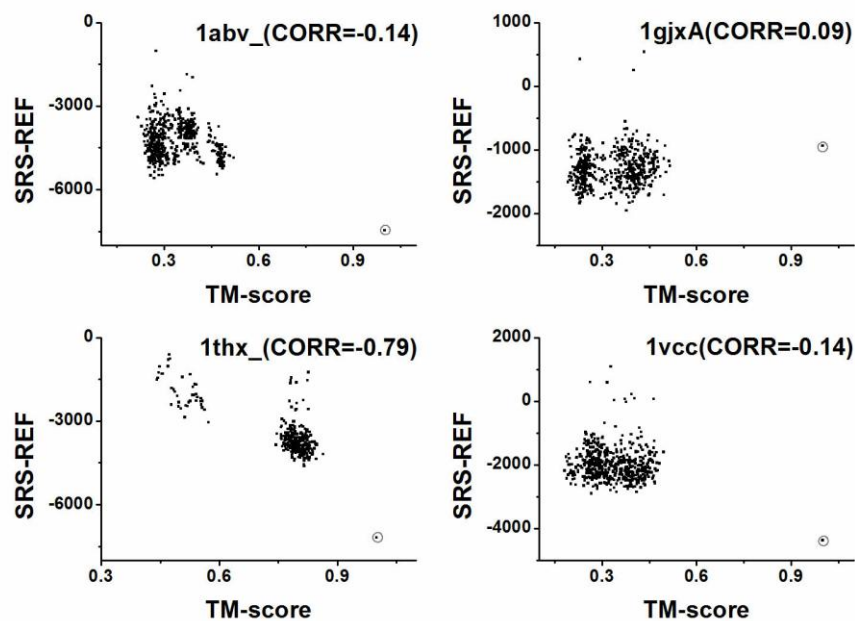

Figure S26. SRS potentials versus TM-score for four representative targets (1abv_, 1gjxA, 1thx_ and 1vcc_) in the I-TASSER decoy set. The native structure is highlighted by the open circles.