

Table S1: Systems with problems detected by Prepsript

Problem	System
Incomplete side chains	
Bound complexes	1A2K, 1AVX, 1BGX, 1D6R, <sup>a</sup> 1DE4, 1E6E, 1E96, <sup>a</sup> 1EER, <sup>c</sup> 1EWY, 1EZU, 1F51, 1FC2, 1GHQ, 1GRN, <sup>a</sup> 1I4D, 1IBR, <sup>c</sup> 1IJK, 1IQD, 1K4C, 1KKL, 1KXQ, 1MAH, <sup>a</sup> 1N2C, 1QFW, 1SBB, 1WQ1, 2HMI, <sup>c</sup> 2JEL, 2QFW
Unbound complexes	1A2K, <sup>b</sup> 1ATN, <sup>c</sup> 1AVX, 1BGX, <sup>b</sup> 1BUH, 1D6R, <sup>a</sup> 1DE4, <sup>c</sup> 1E96, <sup>a</sup> 1EZU, 1F51, 1FAK, <sup>c</sup> 1FC2, <sup>b</sup> 1GP2, <sup>a,b</sup> 1GRN, <sup>a</sup> 1H1V, <sup>c</sup> 1HE1, <sup>a</sup> 1HIA, <sup>a,b</sup> 1I2M, <sup>a</sup> 1I4D, <sup>b</sup> 1IB1, <sup>b</sup> 1IBR, <sup>c</sup> 1IJK, 1IQD, 1K4C, 1KKL, <sup>b</sup> 1KLU, <sup>b</sup> 1KXQ, 1KXP, <sup>a</sup> 1M10, <sup>a,b</sup> 1MAH, <sup>a</sup> 1N2C, <sup>b</sup> 1NSN, 1QFW, 1SBB, 2JEL, 2PCC, <sup>a</sup> 2QFW
Cofactors not defined in charge library	1E6E (FAD), 1EWY (FAD), 1HE8_u (GTN), 1IB1 (COT), 1RLB (REA, RTL), 1TMQ (5HP), 1WQ1_u (GCP)
Problems with protonation	1VFB_u, 2QFW_b
Needed huge grid	1EER <sup>c</sup> , 2VIS_u (Moving molecule has twice the maximum dimension in unbound (135 Å) than in bound (71 Å) coordinates)
Large total charge	1ML0 (-42 for receptor)

<sup>a</sup> Dot was run on these systems and the results are in Table 1.

<sup>b</sup> Systems on which ZDOCK was run, but no correct answers were found.

<sup>c</sup> Systems ranked 'difficult' in Benchmark 2.0, no ZDOCK runs.