| Task | Dataset | Metric | Method | Notes | N | Mean | 95% CI | Meidian |
|-----------------|--------------------------|--------------|---------|----------------------------|-----|------|-----------|---------|
| Small Molecules | PoseBusters V2 | % RMSD < 2 Å | SiteAF3 | AF3 MSA & pocket & hotspot | 308 | 81.2 | 76.4-85.1 | - |
| | | | | AF3 MSA | 308 | 80.8 | 76.1-84.8 | - |
| | | | | pocket & hotspot | 308 | 41.2 | 35.9-46.8 | - |
| | | | | baseline | 308 | 38.6 | 33.4-44.2 | - |
| | | | AF3 | AF3 MSA | 308 | 73.1 | 67.8-77.7 | - |
| | | RMSD (Å) | SiteAF3 | AF3 MSA & pocket & hotspot | 308 | 1.68 | - | 0.38 |
| | | | | AF3 MSA | 308 | 1.78 | - | 0.38 |
| | | | | pocket & hotspot | 308 | 3.41 | - | 2.29 |
| | | | | baseline | 308 | 3.72 | - | 2.56 |
| | | | AF3 | AF3 MSA | 308 | 2.42 | - | 0.55 |
| | FoldBench protein-ligand | % RMSD < 2 Å | SiteAF3 | AF3 MSA & pocket & hotspot | 558 | 69.2 | 65.2-72.9 | - |
| | | | | AF3 MSA | 558 | 69.7 | 65.8-73.4 | - |
| | | | | pocket & hotspot | 558 | 41.6 | 37.6-45.7 | - |
| | | | | baseline | 558 | 36.9 | 33.0-41.0 | - |
| | | | AF3 | AF3 MSA | 558 | 62.0 | 57.9-65.9 | - |
| | | RMSD (Å) | SiteAF3 | AF3 MSA & pocket & hotspot | 558 | 4.03 | - | 0.79 |
| | | | | AF3 MSA | 558 | 4.07 | - | 0.78 |
| | | | | pocket & hotspot | 558 | 3.87 | - | 2.56 |
| | | | | baseline | 558 | 4.32 | - | 3.01 |
| | | | AF3 | AF3 MSA | 558 | 5.29 | - | 1.20 |
| Peptides | PepPCBench | DockQ | SiteAF3 | AF3 MSA & pocket & hotspot | 261 | 0.79 | - | 0.92 |
| | | | | AF3 MSA | 261 | 0.78 | - | 0.92 |
| | | | | pocket & hotspot | 261 | 0.49 | - | 0.45 |
| | | | | baseline | 261 | 0.43 | - | 0.34 |
| | | | AF3 | AF3 MSA | 261 | 0.71 | - | 0.86 |
| Nucleic Acids | FoldBench protein-dsDNA | DockQ | SiteAF3 | AF3 MSA & pocket & hotspot | 214 | 0.54 | - | 0.67 |
| | | | | AF3 MSA | 214 | 0.54 | - | 0.66 |
| | | | | pocket & hotspot | 214 | 0.25 | - | 0.04 |
| | | | | baseline | 214 | 0.12 | - | 0.01 |
| | | | AF3 | AF3 MSA | 214 | 0.49 | - | 0.59 |
| | Alphafold3 protein-RNA | DockQ | SiteAF3 | AF3 MSA & pocket & hotspot | 25 | 0.39 | - | 0.36 |
| | • | | | AF3 MSA | 25 | 0.39 | - | 0.36 |
| | | | | pocket & hotspot | 25 | 0.28 | - | 0.19 |
| | | | | baseline | 25 | 0.27 | - | 0.17 |
| | | | AF3 | AF3 MSA | 25 | 0.34 | - | 0.25 |