**Supplementary Table 2:** Force-dependent Michaelis Menten parameters for the different models of unwinding, for experiments measuring activity against an opposing force.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** |  | **Eq.** |  | **Eq.** |
| PS at Binding |  | (S1) |  | (S2) |
| PS at hydrolysis |  | (S3) |  | (S4) |
| PS at release |  | (S5) |  | (S6) |
| BR before binding |  | (S7) |  | (S8) |
| BR before hydrolysis |  | (S9) |  | (S10) |
| BR before release |  | (S11) |  | (S12) |