What is claimed is:

1. A method of screening for a Cas9 molecule/guide RNA (gRNA) molecule complex, the method comprising:

(a) generating a plurality of samples, each sample comprising a Cas9 molecule/gRNA molecule complex generated by combining a Cas9 molecule and one of a plurality of gRNA molecules;

(b) detecting a melting temperature (Tm) value of the Cas9 molecule/gRNA molecule complex in each of the plurality of samples; and

(c) selecting at least one sample from the plurality of samples based on one or more of (i) a comparison of the Tm values in the plurality of samples to a Tm value of a reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value, or (ii) a relative ordering of the Tm values of the plurality of samples.

2. The method according to claim 1, wherein the step of detecting the Tm value of the Cas9 molecule/gRNA molecule complex in each sample of the plurality of samples includes assessing each sample in the plurality of samples by differential scanning fluorimetry (DSF).

3. The method according to claim 1, wherein the gRNA is a chimeric gRNA.

4. The method according to claim 1, wherein the gRNA is a modular gRNA.

5. The method of claim 1, wherein the Cas9 molecule/gRNA molecule complex is selected if the Tm value of the Cas9 molecule/gRNA molecule complex is at least 1°C, at least 2°C, at least 3°C, at least 4°C, at least 5°C, at least 6°C, at least 7°C, at least 8°C, at least 9°C, at least 10°C, at least 11°C, at least 12°C, at least 13°C, at least 14°C, at least 15°C, at least 16°C, at least 17°C, at least 18°C, at least 19°C, or at least 20°C greater than the Tm value of the reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value.

6. The method of claim 5, wherein the Cas9 molecule/gRNA molecule complex is selected if the Tm of the Cas9 molecule/gRNA molecule complex is at least 8°C greater than the Tm value of the reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value.

7. The method of claim 1, wherein the Cas9 molecule/gRNA molecule complex is selected if the Tm value of the Cas9 molecule/gRNA molecule complex is about 1°C, about 2°C, about 3°C, about 4°C, about 5°C, about 6°C, about 7°C, about 8°C, about 9°C, about 10°C, about 11°C, about 12°C, about 13°C, about 14°C, about 15°C, about 16°C, about 17°C, about 18°C, about 19°C, or about 20°C greater than the Tm value of the reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value.

8. The method of claim 1, wherein the Cas9 molecule/gRNA molecule complex is selected if the Tm value of the Cas9 molecule/gRNA molecule complex is 1°C to 5°C, 6°C to 10°C, 11°C to 15°C, or 16°C to 20°C greater than the Tm value of the reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value.

9. The method of claim 8, wherein the Cas9 molecule/gRNA molecule complex is selected if the Tm value of the Cas9 molecule/gRNA molecule complex is 6°C to 10°C greater than the Tm value of the reference Cas9 molecule/gRNA molecule complex or a pre-determined threshold Tm value.

10. The method of any of claims 1-9, wherein the Tm value is detected using a thermal shift assay.

11. The method of claim 10, wherein the thermal shift assay is selected from differential scanning fluorimetry (DSF), differential scanning calorimetry (DSC), or isothermal titration calorimetry (ITC).

12. The method of any of claims 1-11, wherein the Cas9 molecule is a Cas9 molecule selected from Table 3.

13. The method of any of claims 1-11, wherein the Cas9 molecule is a chimeric Cas9 molecule, or a synthetic or engineered Cas9 molecule, e.g., a Cas9 molecule with a portion or portions deleted.

14. The method of any of claims 1-13, wherein the Cas9 molecule comprises a *S. pyogenes* or a *S. aureus* Cas9 molecule.

15. The method of any of claims 1 to 14, wherein the reference Cas9 molecule/gRNA molecule complex is selected from:

(a) a reference Cas9 molecule in the absence of a gRNA molecule;

(b) a reference Cas9 molecule (e.g., the same Cas9 molecule as the Cas9 molecule in the complex being evaluated) complexed with a second gRNA molecule (i.e., a gRNA other than the one in the complex being evaluated); and

(c) a reference Cas9 molecule/gRNA molecule complex, wherein the reference Cas9 molecule/gRNA molecule was formed under different conditions, e.g., with different proportions of Cas9 molecule and gRNA molecule, than the Cas9 molecule/gRNA molecule complex, or was formed in a different buffer.

16. The method of claim 15, wherein the reference Cas9 molecule is the same as the Cas9 molecule of the complex being evaluated.

17. The method of claim 15, wherein the reference Cas9 molecule is different from the Cas9 molecule of the complex being evaluated.

18. The method of claim 15, wherein the reference Cas9 molecule differs in primary sequence from the Cas9 molecule of the complex being evaluated.

19. The method of any of claims 1 and 15-18, wherein the gRNA molecule of the reference Cas9 molecule/gRNA molecule complex is the same as the gRNA molecule of the complex being evaluated.

20. The method of any of claims 1 and 15-18, wherein the gRNA molecule of the reference Cas9 molecule/gRNA molecule complex is different from the gRNA molecule of the complex being evaluated.

21. The method of claim 20, wherein the gRNA molecule of the reference Cas9 molecule/gRNA molecule complex differs in sequence or differs by a modification from the gRNA molecule of the complex being evaluated.