WHAT IS CLAIMED IS:

1. A recombinant expression system for CRISPR/Cas-directed RNA editing of a target RNA comprising:

(A) a nucleic acid sequence encoding a CRISPR/Cas RNA editing fusion protein comprising a nuclease-dead CRISPR associated endonuclease (dCas) fused to a catalytically active deaminase domain of Adenosine Deaminase acting on RNA (ADAR); and

(B) a nucleic acid sequence encoding an extended single guide RNA (esgRNA) comprising: (i) a short extension sequence of homology to the target RNA comprising a mismatch for a target adenosine, and (ii) a dCas scaffold binding sequence.

2. The recombinant expression system of claim 1, wherein the esgRNA further comprises (iii) a spacer sequence comprising a region of homology to the target RNA.

3. The recombinant expression system of claim 1, wherein (A) and (B) are comprised within the same vector or comprised within different vectors.

4. The recombinant expression system of any one of the preceding claims, wherein the ADAR is selected from the group consisting of ADAR1, ADAR2, and ADAR3.

5. The recombinant expression system of claim 4, wherein the catalytically active deaminase domain of ADAR is the catalytically active deaminase domain of ADAR2.

6. The recombinant expression system of claim 5, wherein the catalytically active deaminase domain of ADAR2 is (1) a wildtype catalytically active deaminase domain of human ADAR2 or (2) a mutant human catalytically active deaminase domain of ADAR2 with increased catalytic activity compared to the wildtype human ADAR2.

7. The recombinant expression system of claim 6, wherein the mutant human catalytically active deaminase domain of ADAR2 comprises a E488Q mutation.

8. The recombinant expression system of any one of the preceding claims, wherein the dCas is nuclease-dead Cas9 (dCas9).

9. The recombinant expression system of claim 8, wherein the dCas9 N-terminal domain is fused to the C-terminus of the catalytically active deaminase domain of ADAR.

10. The recombinant expression system of any one of the preceding claims, wherein the dCas is fused to the catalytically active deaminase domain of ADAR via a linker.

11. The recombinant expression system of claim 10, wherein the linker is a semi-flexible XTEN peptide linker.

12. The recombinant expression system of any one of the previous claims, wherein the short extension sequence of the esgRNA is a 3' extension sequence.

13. The recombinant expression system of any one of the previous claims, wherein the short extension sequence of the esgRNA comprises a region of homology capable of near-perfect RNA-RNA base pairing with the target sequence.

14. The recombinant expression system of any one of the preceding claims, wherein the short extension sequence of the esgRNA further comprises a second mismatch for an adenosine within the target RNA.

15. The recombinant expression system of claim 14, wherein the short extension sequence of the esgRNA further comprises a third mismatch for an adenosine within the target RNA and optionally a fourth mismatch for an adenosine within the target RNA.

16. The recombinant expression system of any one of the previous claims, wherein the short extension sequence of the esgRNA is about 15 nucleotides to about 60 nucleotides in length.

17. The recombinant expression system of any one of the previous claims, wherein the esgRNA further comprises a marker sequence.

18. The recombinant expression system of any one of the previous claims, wherein the esgRNA further comprises a RNA polymerase III promoter sequence.

19. The recombinant expression system of claim 18, wherein the RNA polymerase III promoter sequence is a U6 promoter sequence.

20. The recombinant expression system of any one of the previous claims, wherein the esgRNA comprises a linker sequence between the spacer sequence and the scaffold sequence.

21. The recombinant expression system of claim 2, wherein the sequences of the esgRNA (i), (ii), and (iii) are situated 3' to 5' in the esgRNA.

22. The recombinant expression system of any one of the previous claims, further comprising a nucleic acid encoding a PAM sequence.

23. The recombinant expression system of claim 3, wherein the vector is a viral vector.

24. The recombinant expression system of claim 22, wherein the viral vector is an adeno-associated viral vector (AAV), lentiviral vector, or an adenoviral vector.

25. A vector comprising a nucleic acid encoding an extended single guide RNA (esgRNA) comprising (i) a short extension sequence of homology to a target RNA comprising a mismatch for a target adenosine, (ii) a dCas scaffold binding sequence, and (iii) a sequence complementary to the target sequence (spacer sequence), wherein (i), (ii) and (iii) are situated 3' to 5' in the esgRNA.

26. The vector of claim 25, wherein the vector is a viral vector.

27. The vector of claim 26, wherein the viral vector is an adeno-associated viral vector (AAV), lentiviral vector, or an adenoviral vector.

28. The vector of any one of claims 25 to 27, further comprising an expression control element.

29. A viral particle comprising the vector of any one of claims 25-28.

30. A cell comprising any one of the recombinant expression systems of claims 1 to 24, the vectors of claims 25-28, or the viral particle of claim 29.

31. An esgRNA comprising: (i) a short extension sequence of homology to a target RNA comprising a mismatch for a target adenosine, and (ii) a dCas scaffold binding sequence.

32. A CRISPR/Cas RNA editing fusion protein comprising a nuclease-dead CRISPR associated endonuclease (dCas) fused to a catalytically active deaminase domain of ADAR.

33. A method of selective RNA editing comprising administering any one of the recombinant expression systems of claims 1 to 24, the vectors of claims 25-28, or the viral particle of claim 29 to a cell.

34. The method of claim 33, further comprising administering an antisense synthetic oligonucleotide compound comprising alternating 2'OMe RNA and DNA bases (PAMmer).

35. The method of claim 33 or 34, wherein the method is *in vitro* or *in vivo*.

36. A method of characterizing the effects of directed cellular RNA editing on processing and dynamics comprising administering any one of the recombinant expression systems of claims 1 to 24, the vectors of claims 25-28, the viral particle of claim 29, or the cell of claim 30 to a sample and determining its effects.

37. The method of claim 36, wherein the sample is derived from a subject.

38. A method of treating a disease or condition in a subject comprising administering any one of the recombinant expression systems of claims 1 to 24, the vectors of claims 25-28, the viral particle of claim 29, or the cell of claim 30 to a subject or a sample isolated from a subject.

39. The method of claim 38, further comprising correction of a G to A mutation in a target RNA.

40. The method of claim 38 or 39, wherein the disease is selected from the group of Hurler's syndrome, Cystic fibrosis, muscular dystrophy, spinal cord injury, stroke, traumatic brain injury, hearing loss (through noise overexposure or ototoxicity), multiple sclerosis, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), Parkinson's disease, alcoholism, alcohol withdrawal, over-rapid benzodiazepine withdrawal, and Huntington's disease.

41. A kit comprising:

(A) one or more of:

(i) recombinant expression system according to any one of claims 1 to 24;

(ii) vector according to any one of claims 25-28;

(iii) viral particle according to claim 29; and/or

(iv) cell according to claim 30;

(v) esgRNA according to claim 31;

(vi) and a CRISPR/Cas RNA editing fusion protein according to claim 32; and

(B) instructions for use.

42. The kit of claim 41, wherein the instructions are for use according to any one of the methods of claims 33-40.