10. A composition, ~~comprising~~consisting of:

a substrate having attached thereto amino acid sequences, the amino acid sequences consisting of a first amino acid sequence and a second amino acid sequence, each defined by a plurality of amino acids forming the respective sequences, the second amino acid sequence having the same number of amino acid residues as the first sequence, wherein the second amino acid sequence is identical to the first amino acid sequence except at one or more locations where the first amino acid sequence contains a first, isobaric amino acid, and the second amino acid sequence contains at a corresponding position, a second amino acid structurally different from the first amino acid and having a molecular weight different than the first amino acid.

11. The composition of claim 10, further comprising a particle comprising the first amino acid sequence and the second amino acid sequence.

12. The composition of claim 11, wherein the first amino acid sequence and the second amino acid sequence are each attached to the particle by a cleavable linker.

13. The composition of claim 12, wherein the cleavable linker is a methionine residue.

14. The composition of any one of claims 10-13, wherein the isobaric amino acid is leucine or isoleucine.

15. The composition of any one of claims 10-14, wherein the isobaric amino acid is lysine or glutamine.

16. The composition of any one of claims 10-15, wherein the isobaric amino acid is an unnatural amino acid.

17. The composition of any one of claims 10-16, wherein the second amino acid is an unnatural amino acid.

18. A surface to which is attached amino acid sequences, the amino acid sequences consisting of a first amino acid sequence and a second amino acid

10. A composition, consisting of:

a substrate having attached thereto amino acid sequences, the amino acid sequences consisting of a first amino acid sequence and a second amino acid sequence, each defined by a plurality of amino acids forming the respective sequences, the second amino acid sequence having the same number of amino acid residues as the first sequence, wherein the second amino acid sequence is identical to the first amino acid sequence except at one or more locations where the first amino acid sequence contains a first, isobaric amino acid, and the second amino acid sequence contains at a corresponding position, a second amino acid structurally different from the first amino acid and having a molecular weight different than the first amino acid.

11. The composition of claim 10, further comprising a particle comprising the first amino acid sequence and the second amino acid sequence.

12. The composition of claim 11, wherein the first amino acid sequence and the second amino acid sequence are each attached to the particle by a cleavable linker.

13. The composition of claim 12, wherein the cleavable linker is a methionine residue.

14. The composition of any one of claims 10-13, wherein the isobaric amino acid is leucine or isoleucine.

15. The composition of any one of claims 10-14, wherein the isobaric amino acid is lysine or glutamine.

16. The composition of any one of claims 10-15, wherein the isobaric amino acid is an unnatural amino acid.

17. The composition of any one of claims 10-16, wherein the second amino acid is an unnatural amino acid.

18. A surface to which is attached amino acid sequences, the amino acid sequences consisting of a first amino acid sequence and a second amino acid