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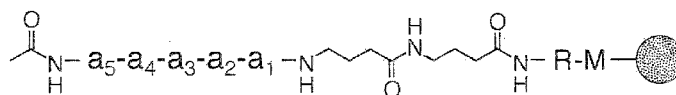
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(54) Title: PEPTIDE LIBRARIES FOR SCREENING AND OTHER APPLICATIONS

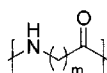


R → D—Arginine

M → Methioine

a₁ to a₅ → 17 amino acids except R, C and M

Fig. 1



(57) Abstract: The present invention generally relates to various peptides and particles, for example, for use in screening of particle- or bead-based peptide libraries. In one aspect, the present invention is generally directed to articles including peptides attached to one or more particles, which may have structures such as (particle)-M-Q-Z_n-X-J, (particle)-M-Q-Z_n-X¹-X²-X³-X⁴-X⁵-J, (particle)-M-R-Z_n-X¹-X²-X³-X⁴-X⁵-J, (particle)-M-R-X¹-X²-X³-X⁴-X⁵-Z_n-Q-J, (particle)-M-X¹-X²-X³-X⁴-X⁵-Z_n-R-J, etc., where M is a methionine residue, M1 is a cleavable linker residue, Q is a group able to enhance intensity and/or sensitivity of mass spectrometry, X comprises one or more amino acid residues, n is a positive integer, Z is a covalent bond or a spacer, and J is an end-group. In some embodiments, the spacer may comprise a structure such as: (I). Other aspects of the present invention generally relate to methods of using such articles, e.g., by exposing the article to a target molecule such as a protein, for example, for use in screening of particle-based peptide libraries. Still other aspects of the present invention generally relate to methods of making such articles, methods of promoting such articles, kits involving such articles, or the like.



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