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(71) Applicant: SUPERARRAY, INC. [US/US]; P.O. Box 34494, Bethesda, MD 20827-0494 (US).

(72) Inventors: SHEN, Li; 11602 Gainsborough Road, Potomac, MD 20854 (US). CEN, Debra, Hui; 5142 Masonic Avenue, Oakland, CA 94618 (US).

(74) Agents: CHEN, Peng et al.; Morrison & Foerster LLP, Suite 300, 12636 High Bluff Drive, San Diego, CA 92130-2071 (US).

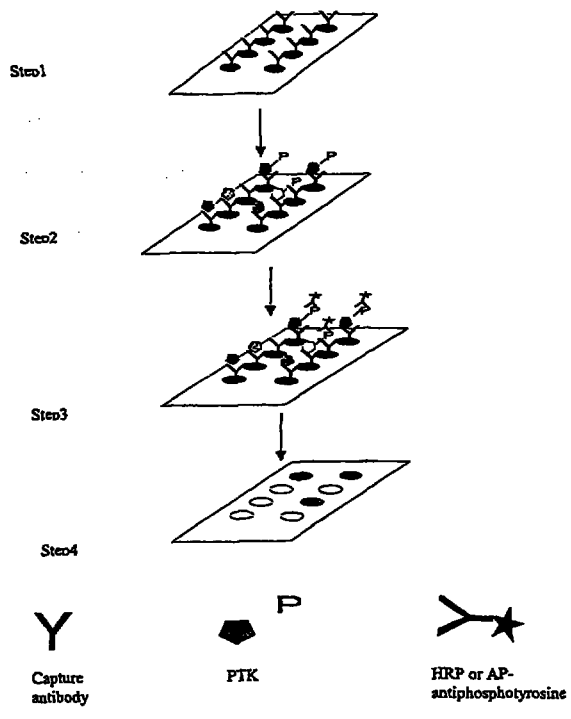
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(54) Title: COMPOSITIONS AND METHODS FOR DETECTING PROTEIN MODIFICATION AND ENZYMATIC ACTIVITY




(57) Abstract: This invention relates generally to the field of protein modification, *e.g.*, post-translational modification. In particular, the invention provides a method for detecting protein modification profile in a sample, which method comprises: a) contacting a sample containing or suspected of containing a target protein with a capture molecule, or a plurality of capture molecules, immobilized on a solid support, said capture molecule is capable of specifically binding to said target protein, whereby said target protein is immobilized on said solid support; and b) assessing modification status and/or identity of said immobilized target protein. Kits and arrays useful for detecting protein modification are also provided. Arrays, kits and methods useful for detecting enzymatic activities, especially protein modification enzymatic activities, are further provided.

WO 01/27624 A2