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(54) Title: METHODS FOR IDENTIFICATION OF COGNATE PAIRS OF LIGANDS AND RECEPTORS

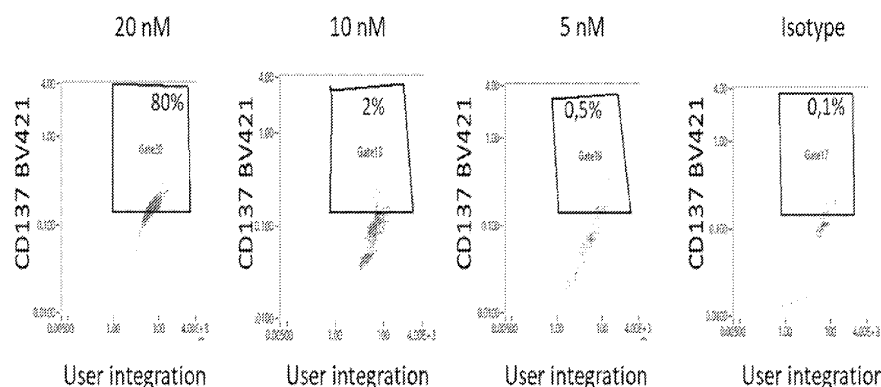


FIG. 1

(57) **Abstract:** Provided herein are methods for identifying cognate pairs of a ligand species and a receptor species. The methods comprise (a) providing a set of ligand species, wherein each ligand species is represented at least one time; (b) providing a set of receptor species, wherein each receptor species is represented at least one time; (c) contacting the set of ligand species with the set of receptor species in a microreactor, wherein upon selective binding of a ligand species with a receptor species an enhanced signal is produced; (d) detecting a cognate pair of ligand species and receptor species by the production of the enhanced signal; and (e) identifying the cognate pair of ligand species and receptor species.

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