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(54) Title: METHODS AND ASSAYS FOR DETECTING GUANYLATE CYCLASE ACTIVITY

(57) Abstract: The present invention relates to soluble guanylate cyclase (sGC) enzymes. In particular it provides a cell-based assay system which allows to detect with high efficiency and sensitivity the soluble guanylate cyclase enzymatic activity. In a preferred embodiment, the invention provides a method of screening molecules that interact with sGC by stimulating or inhibiting its enzymatic activity and that can be used in the diagnosis or therapy of sGC-mediated dysfunctions or diseases. The invention further provides gene-constructs, vectors, and cells for use in said method.

