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(54) Title: METHODS OF SCREENING FOR INTRODUCTION OF DNA INTO A TARGET CELL

(57) Abstract: The present invention provides methods of introducing a polynucleotide into a target cell, wherein the method employs a light generating protein coding sequence acting as a reporter. An important advantage of the methods described herein is that drug resistant target cells or target cells having no useful auxotrophic markers can be effectively transformed. The present invention also includes transformed cells produced by the methods described herein. Also described are light generating protein coding sequence modifications, a variety of vectors, and methods of using the transformed cells of the present invention.