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(57) Abstract :

A METHOD FOR DETERMINING THE EFFICACY OF SITAGLIPTIN PHOSPHATE, PIOGLITAZONE HYDROCHLORIDE, AND ROSIGLITAZONE R-ENANTIOMERS COMPARED WITH TO RACEMIC FORMS ABSTRAC5 T A method (900) for determining the efficacy of sitagliptin phosphate, pioglitazone hydrochloride, and rosiglitazone R-enantiomers compared to racemic forms for antidiabetic drug development is provided. The method includes seeding (902) 3T3-L1 cells 10 in six-well plates and incubating the cells overnight, replacing (904) a culture medium with glucose and serum-free DMEM culture medium including insulin and 2-NBDG, adding (906) one of sitagliptin phosphate, pioglitazone hydrochloride, and rosiglitazone into the culture medium, discarding (908) the culture medium and rinsing the cells twice with PBS, adding trypsin and incubating cells at 37 °C for 3-4 minutes, adding (910) 1 15 ml of growth media to the cells at 25 °C and collecting the cells into FACS tubes, maintaining and centrifuging the FACS tubes at 2500 rpm for five minutes, and aspirating a supernatant, achieving (912) cell separation by resuspending the cells in PBS and thoroughly mixing, employing (914) flow cytometry to analyze the cells. 20 [FIG. 9]

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