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(54) Title: ENGINEERED ENZYME FOR PREPARING A HYDROXYLATED INDANONE INTERMEDIATE USEFUL IN THE SYNTHESIS OF BELZUTIFAN

(57) Abstract: The present disclosure provides enzymes derived from the fungi *Fusarium oxysporum* c8D ("FoPip4H enzymes") having improved properties as compared to a naturally occurring wild-type enzyme including the capability of hydroxylating certain substituted indanones to provide optically pure 3-hydroxyindanones. Also provided are polynucleotides encoding the FoPip4H enzymes, host cells capable of expressing the FoPip4H enzymes, and processes for using the FoPip4H enzymes to synthesize (R)-4-fluoro-3-hydroxy-7-(methylsulfonyl)-2,3-dihydro-1H-inden-1-one, a useful intermediate in the synthesis of belzutifan.



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