Supplementary Material

**Synthesis and evaluation of 5-fluoro-2-oxindole derivatives as α-glucosidase inhibitors**

Jing Lin†, Qi-Ming Liang†, Yuan-Na Ye, Di Xiao, Li Lu, Meng-Yue Li, Jian-Ping Li, Yu-Fei Zhang, Zhuang Xiong\*, Na Feng\*, Chen Li\*

School of Biotechnology and Health Sciences, Wuyi University, Jiangmen 529000, P. R. China

†Jing Lin and Qi-Ming Liang contributed equally to this work.

\*Corresponding authors: Zhuang Xiong, Na Feng, Chen Li. Email: wyuchemxz@126.com; wyuchemfn@126.com; wyuchemlc@126.com.Tel./fax.: +86 750 3299397

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**Fig. S1** IC50 of compound **3d** against α-glucosidase



**Fig. S2** IC50 of compound **3f** against α-glucosidase



**Fig. S3** IC50 of compound **3i** against α-glucosidase



**Fig. S4** IC50 of **acarbose** against α-glucosidase



**Fig.S5** Lineweaver-Burk plots of **acarbose** against α-glucosidase



**Fig.S6** Inhibition mechanism determination of compound **3d** on α-glucosidase

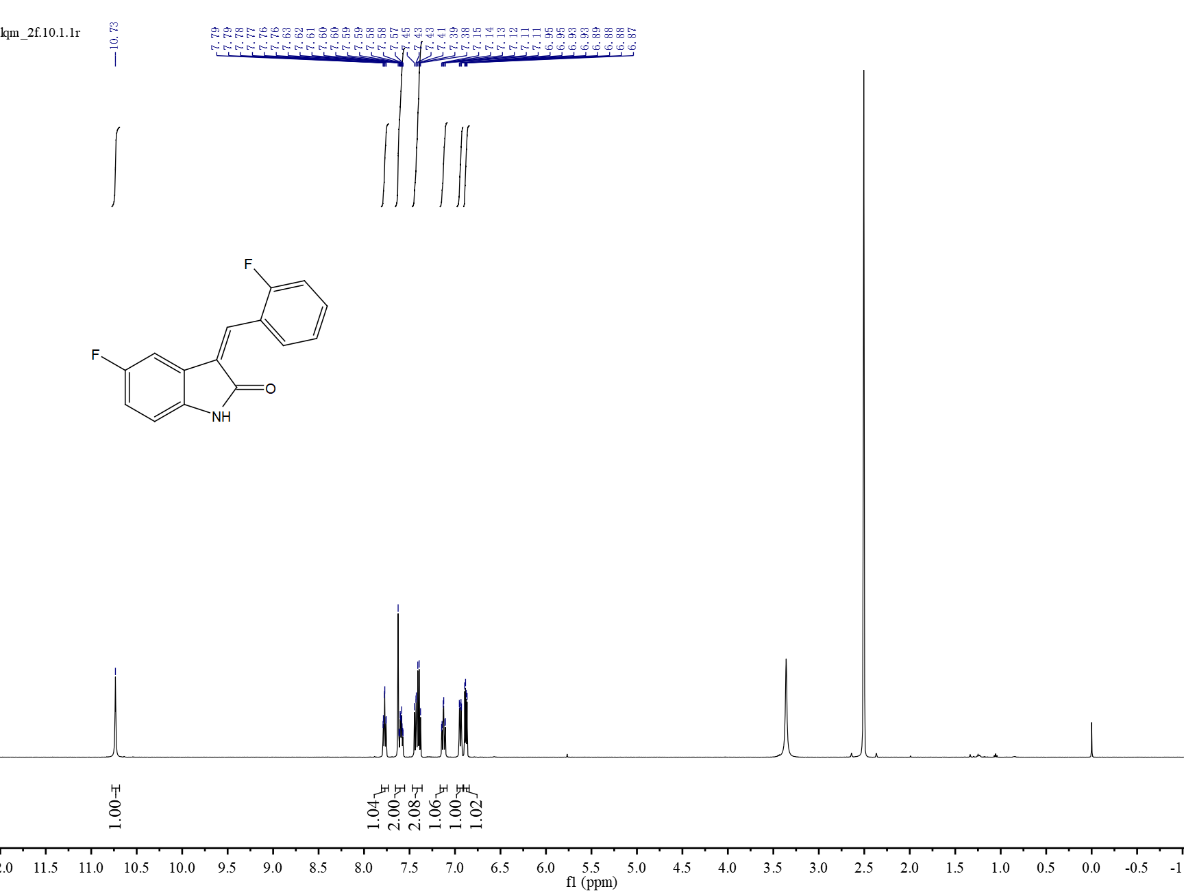


**Fig.S7** Inhibition mechanism determination of compound **3i** on α-glucosidase.





**Fig.8** Lineweaver-Burk plots of compounds **3d** and **3i** on α-glucosidase. Plot of slope vs the concentration of compounds **3d** and **3i** for the calculation of the inhibition constant *K*I. Plot of intercept vs the concentration of compounds **3d** and **3i** for the determination of the inhibition constant *K*IS.



**Fig.S9** 1H NMR of compound **3a**



**Fig.S10** 1H NMR of compound **3b**



**Fig.S11** 1H NMR of compound **3c**



**Fig.S12** 1H NMR of compound **3d**



**Fig.S13** 1H NMR of compound **3e**



**Fig.S14** 1H NMR of compound **3f**



**Fig.S15** 1H NMR of compound **3g**



**Fig.S16** 1H NMR of compound **3h**



**Fig.S17** 1H NMR of compound **3i**



**Fig.S18** 1H NMR of compound **3j**



**Fig.S19** 1H NMR of compound **3k**



**Fig.S20** 1H NMR of compound **3l**



**Fig.S21** 1H NMR of compound **3m**



**Fig.S22** 1H NMR of compound **3n**



**Fig.S23** 1H NMR of compound **3o**



**Fig.S24** 1H NMR of compound **3p**



**Fig.S25** 1H NMR of compound **3q**



**Fig.S26** 1H NMR of compound **3r**



**Fig.S27** 1H NMR of compound **3s**



**Fig.S28** 1H NMR of compound **3t**



**Fig.S29** 1H NMR of compound **3u**



**Fig.S30** 1H NMR of compound **3v**