Fig. S1 Linear correlation between target compound content and in vitro mammalian α-glucosidase inhibition achieved at 160 µg mL^{-1} by (a) ten xanthone-enriched fractions (XEFs) and (b) ten benzophenone-enriched fractions (BEFs) of *Cyclopia genistoides*, tested in triplicate (n = 30 for XEFs and BEFs).
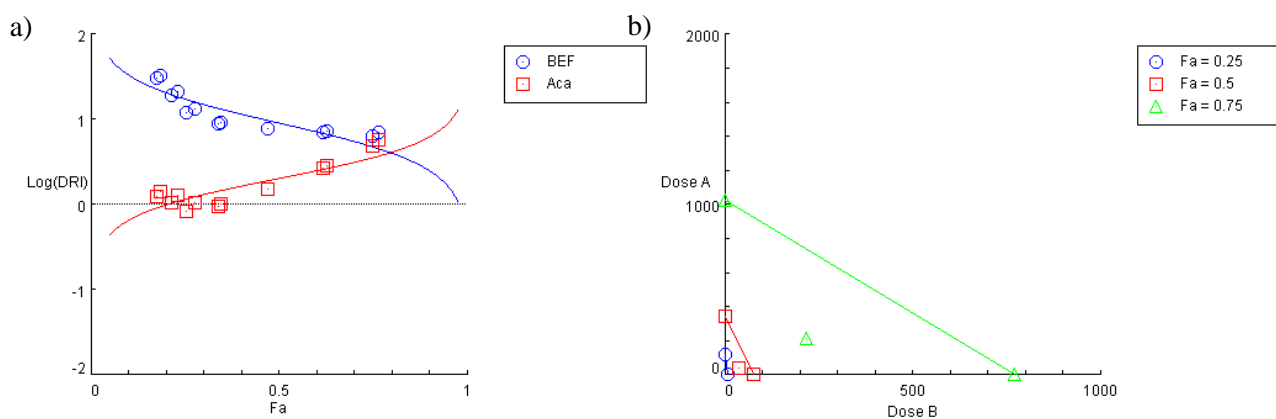

Fig. S2 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 1: acarbose (Aca) with benzophenone-enriched fraction (BEF$_0$) (generated by CompuSyn Version 1.0).
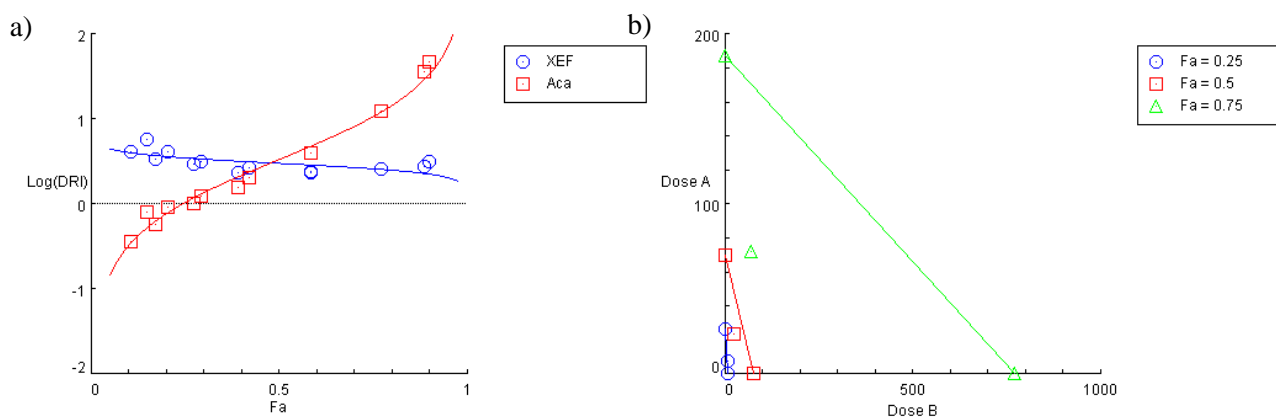

Fig. S3 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 2: acarbose (Aca) with xanthone-enriched fraction (XEF$_0$) (generated by CompuSyn Version 1.0).
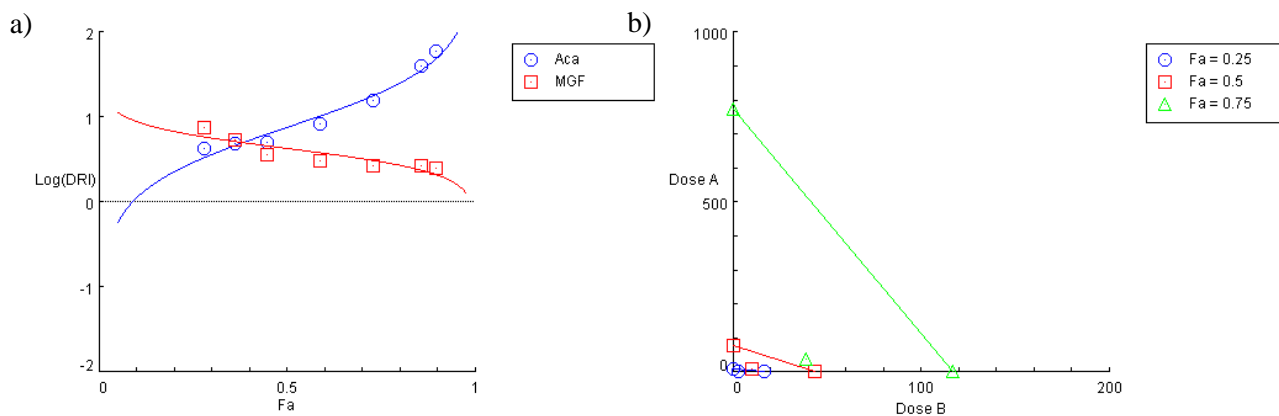
Fig. S4 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 3: acarbose (Aca) with mangiferin (MGF) (generated by CompuSyn Version 1.0).
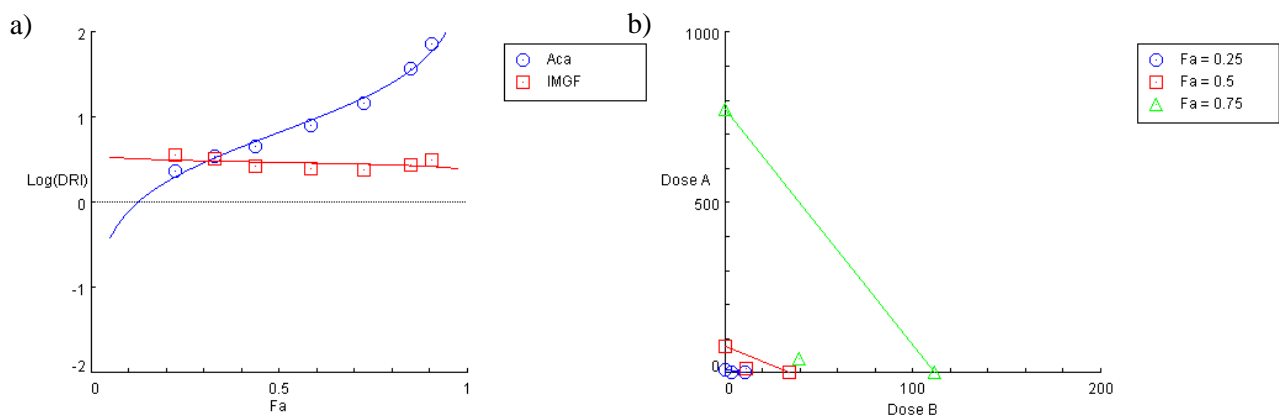

Fig. S5 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 4: acarbose (Aca) with isomangiferin (IMGF) (generated by CompuSyn Version 1.0).
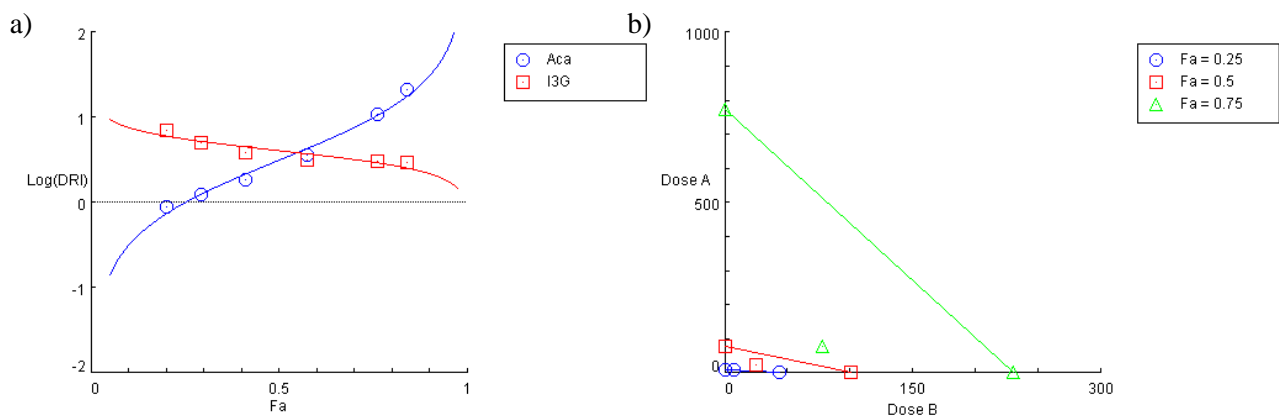

Fig. S6 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 5: acarbose (Aca) with 3-β-D-glucopyranosyliriflophenone (I3G) (generated by CompuSyn Version 1.0).
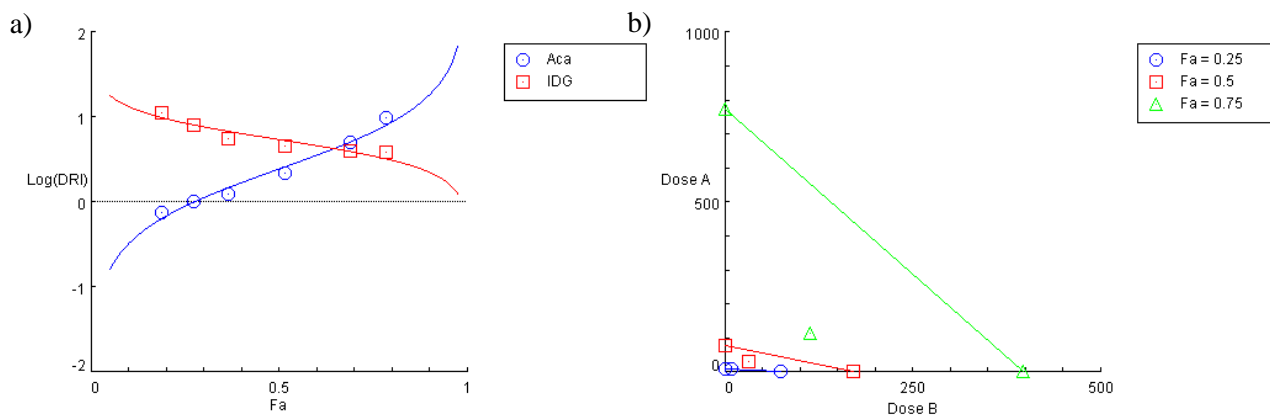
Fig. S7 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 6: acarbose (Aca) with 3-β-D-glucopyranosyl-4-*O*-β-D-glucopyranosyliriflophenone (IDG) (generated by CompuSyn Version 1.0).
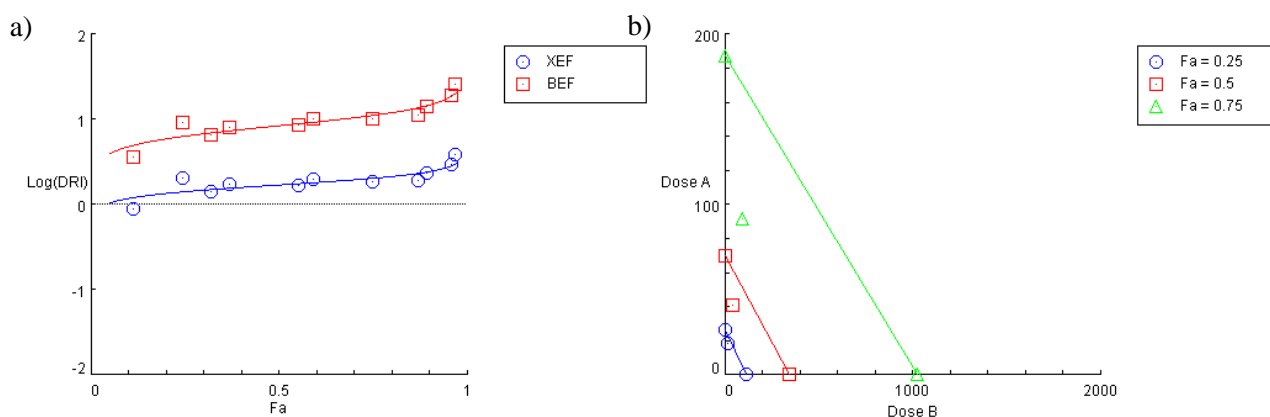

Fig. S8 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 7: benzophenone-enriched fraction (BEF_0) with xanthone-enriched fraction (XEF_0) (generated by CompuSyn Version 1.0).
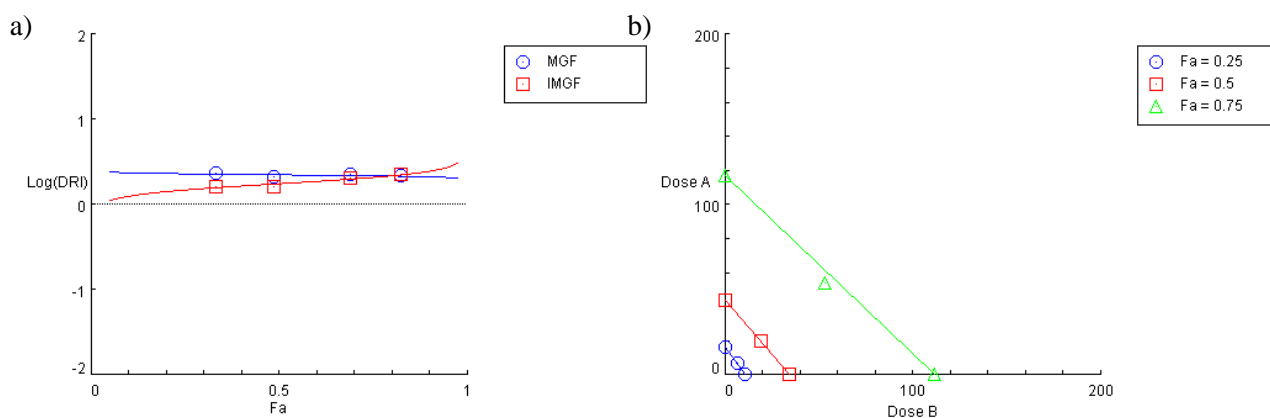

Fig. S9 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at F_a = 0.25, 0.50 and 0.75 for combination 8: mangiferin (MGF) with isomangiferin (IMGF) (generated by CompuSyn Version 1.0).
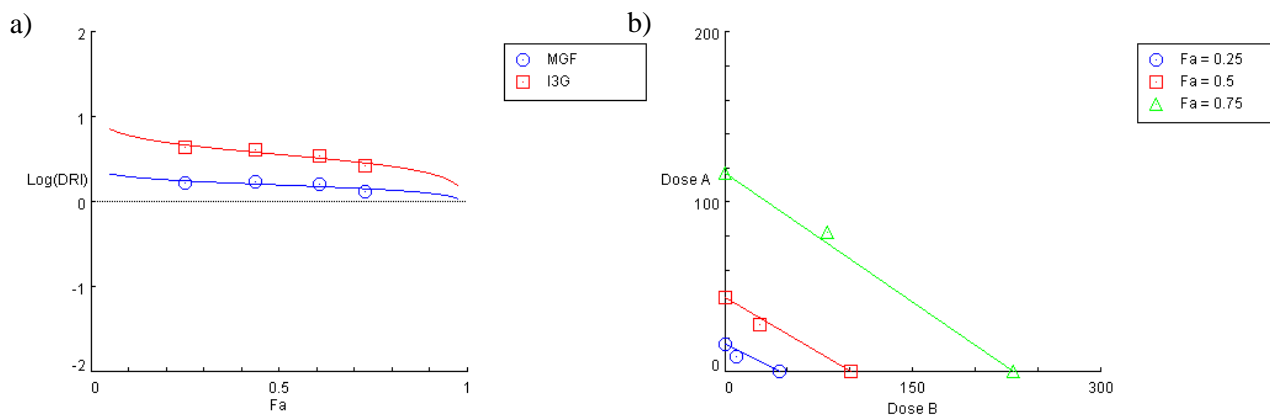
Fig. S10 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at $F_a =$ 0.25, 0.50 and 0.75 for combination 9: mangiferin (MGF) with 3-β-D-glucopyranosyliriflophenone (I3G) (generated by CompuSyn Version 1.0).
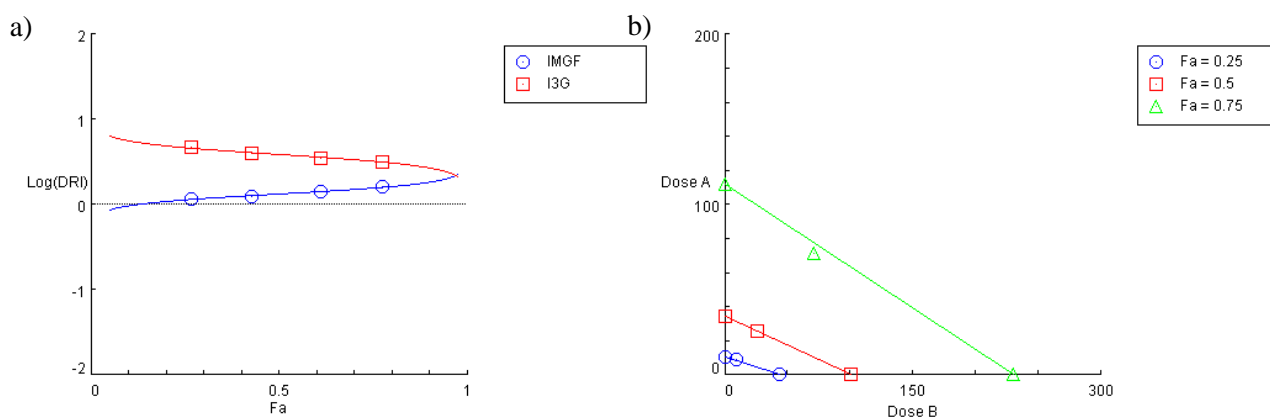

Fig. S11 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at $F_a =$ 0.25, 0.50 and 0.75 for combination 10: isomangiferin (IMGF) with 3-β-D-glucopyranosyliriflophenone (I3G) (generated by CompuSyn Version 1.0).
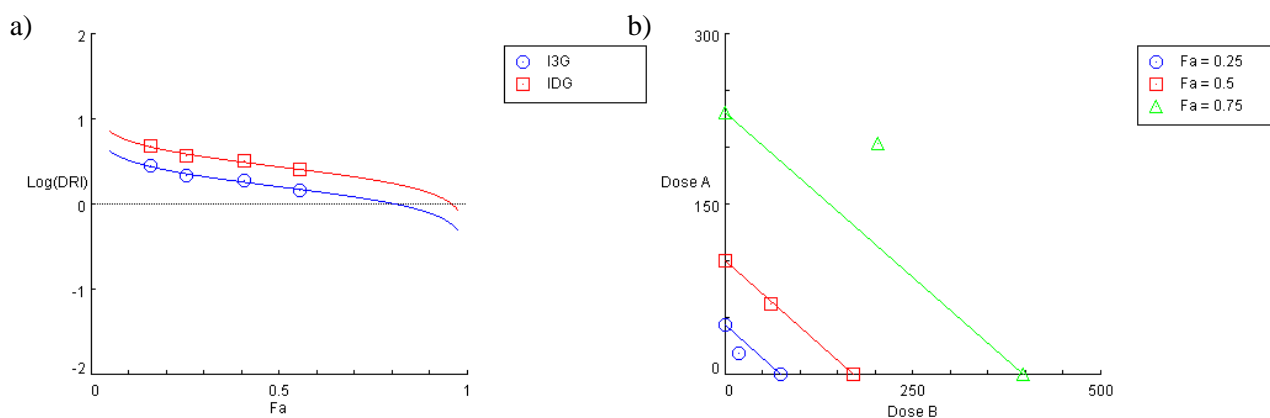

Fig. S12 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at $F_a =$ 0.25, 0.50 and 0.75 for combination 11: 3-β-D-glucopyranosyl-4-*O*-β-D-glucopyranosyliriflophenone (IDG) with 3-β-D-glucopyranosyliriflophenone (I3G) (generated by CompuSyn Version 1.0).
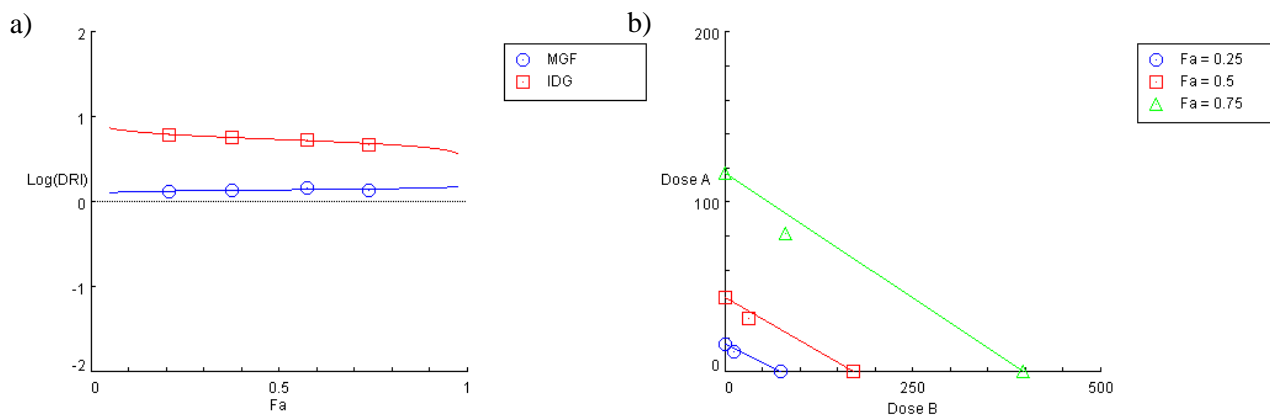
Fig. S13 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at $F_a =$ 0.25, 0.50 and 0.75 for combination 12: 3-β-D-glucopyranosyl-4-*O*-β-D-glucopyranosyliriflophenone (IDG) with mangiferin (MGF) (generated by CompuSyn Version 1.0).
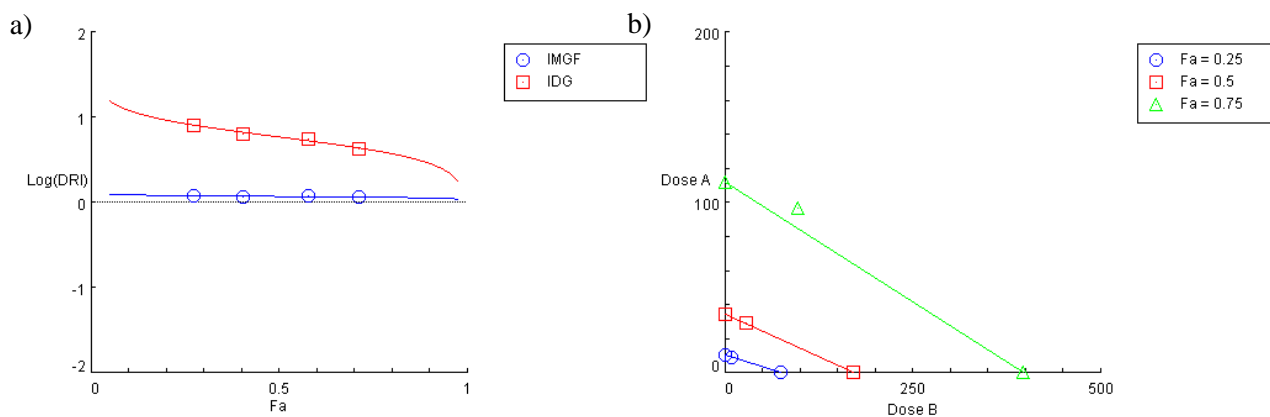

Fig. S14 (a) Effect level (F_a) vs. logarithmic dose reduction index [log (DRI)] plots and (b) isobolograms at $F_a =$ 0.25, 0.50 and 0.75 for combination 13: 3-β-D-glucopyranosyl-4-*O*-β-D-glucopyranosyliriflophenone (IDG) with isomangiferin (IMGF) (generated by CompuSyn Version 1.0).