

Table S1. The 49 of targeted genes that synergistically inhibit cancer cell viability with cannabinoid

WIN55, 212-2 using siRNA screening.			
Genes	Proliferation rate SiRNA group	Proliferation rate SiRNA plus WIN group	Synergistic activity (SA)
AKAP8	0.942	0.711	0.231
SNX16	0.953	0.79	0.163
RNASEL	0.950	0.805	0.145
TAOK2	0.959	0.821	0.138
STK4	0.935	0.802	0.134
LRRK2	0.977	0.851	0.126
PRKCD	0.976	0.861	0.115
SKP2	0.998	0.891	0.107
CKB	0.992	0.887	0.105
RPS6KA3	0.983	0.882	0.101
TNK1	0.727	0.629	0.098
CDC2L5	0.923	0.827	0.096
MKNK1	0.950	0.857	0.093
PDGFRB	0.99	0.898	0.091
FN3K	0.929	0.838	0.091
RIPK2	1.053	0.800	0.253
ITK	1.053	0.865	0.188
CDKL5	1.023	0.834	0.188
IHPK3	1.047	0.859	0.187
SRMS	1.001	0.836	0.165
PLK3	1.078	0.916	0.162
MAPK8	1.022	0.860	0.162
PRKCI	1.031	0.876	0.155
AXL	1.027	0.877	0.151
MAPK7	1.01	0.861	0.149
PCTK2	1.01	0.862	0.148
PDK2	1.074	0.93	0.145
CLK2	1.086	0.944	0.142
CDK10	1.038	0.896	0.142
MAPK6	1.024	0.886	0.138
CSNK2A2	1.042	0.907	0.134
CIB4	1.000	0.87	0.13
STK17B	1.002	0.873	0.128
SH3BP5	1.053	0.926	0.127
ACVR2B	1.043	0.915	0.127
PCTK3	1.047	0.928	0.12
PKLR	1.057	0.938	0.119
BUB1B	1.013	0.907	0.107
ATR	1.012	0.907	0.105

PDGFRL	1.052	0.950	0.102
CLK3	1.053	0.953	0.1
SH3BP4	1.008	0.908	0.1
PRKCSH	1.063	0.964	0.099
ERN1	1.006	0.909	0.097
MARK3	1.047	0.952	0.096
ACVR1B	1.015	0.923	0.092
GRK6	1.047	0.956	0.091
CALM3	1.011	0.921	0.091
MINK1	0.892	0.800	0.092

Synergistic activity (SA), was calculated with formula as follow: SA= Inhibition Rate (siRNA)- Inhibition Rate (siRNA + WIN 55,212-2). The potential synergistic genes involved into the cancer pathway were marked in red.

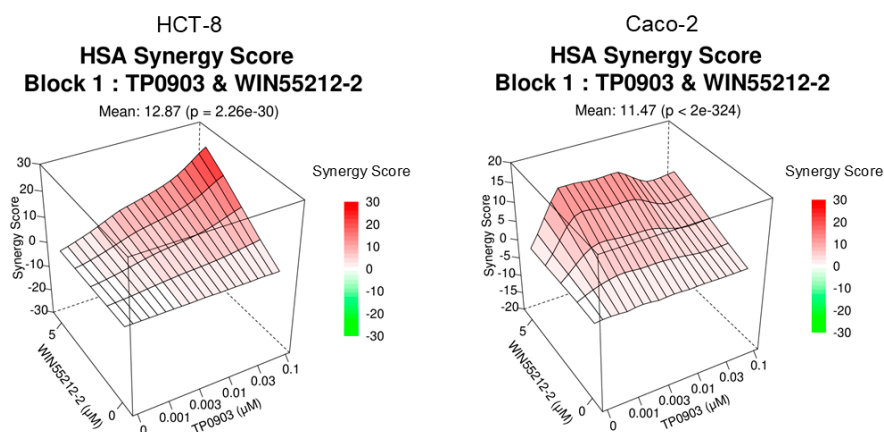
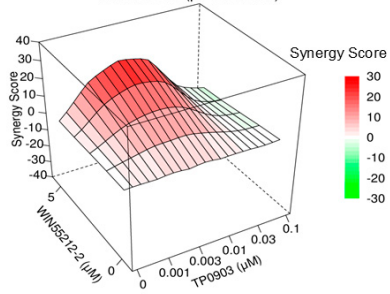
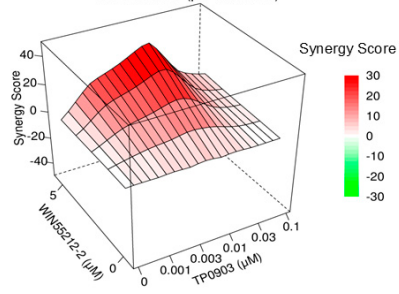


Figure S1. The Synergy Score of TP0903 plus WIN55212-2 treatment in HCT-8 and Caco-2 cells using the HSA model in SynergyFinder 3.0 website analysis.

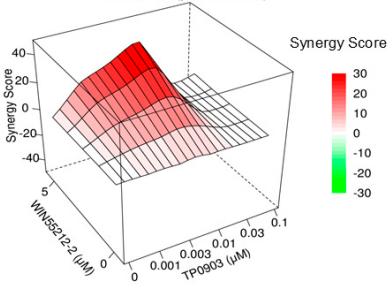
ZIP Synergy Score
Block 1 : TP0903 & WIN55212-2
Mean: 12.19 ($p = 2.90e-07$)



HSA Synergy Score
Block 1 : TP0903 & WIN55212-2
Mean: 20.91 ($p = 3.71e-28$)



Loewe Synergy Score
Block 1 : TP0903 & WIN55212-2
Mean: 18.13 ($p = 7.70e-19$)



Bliss Synergy Score
Block 1 : TP0903 & WIN55212-2
Mean: 13.07 ($p = 1.88e-07$)

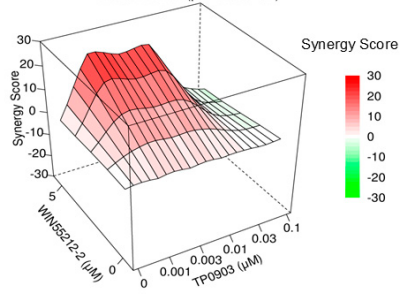


Figure S2. The Synergy Score of TP0903 plus WIN55212-2 treatment in HCT-8 cells using the ZIP, HAS, Loewe and Bliss models in SynergyFinder 3.0 website analysis.

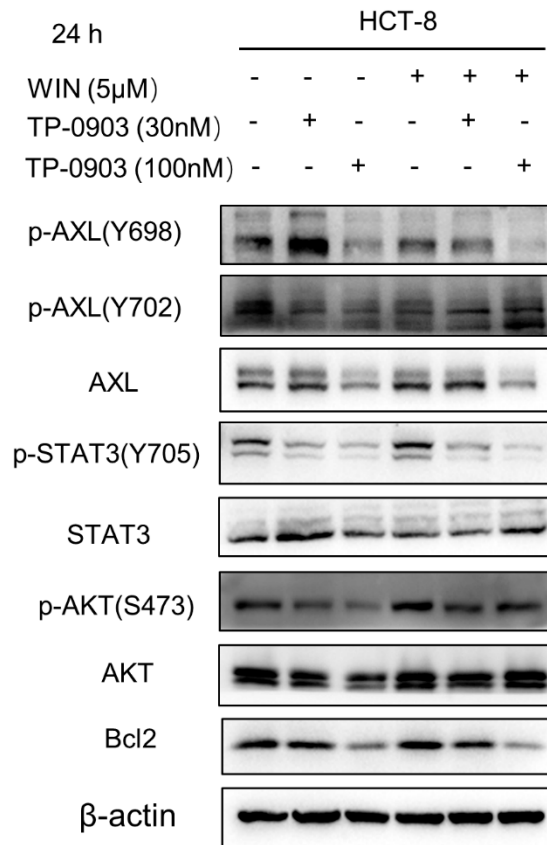


Figure S3. HCT-8 cells were treated with TP-0903 (30 nM or 100 nM) alone or in combination with 5 μ M of WIN55212-2 for 24 h. The expressions of phosphorylated AXL (p-AXL_{Tyr698}, p-AXL_{Tyr702}), phosphorylated AKT (p-AKT_{Ser473}), phosphorylated STAT3 (p-STAT3_{Tyr705}), AXL, AKT, STAT3 and BCL2 were evaluated by western blot analysis.

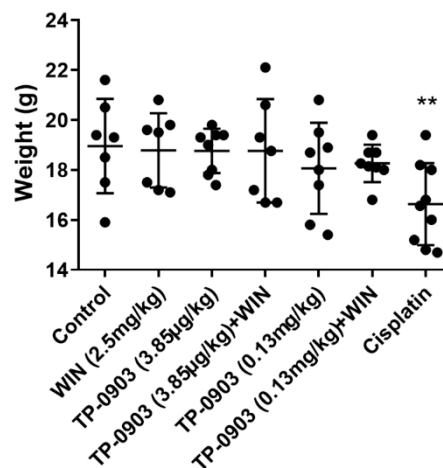


Figure S4. BALB/c nude mice were injected subcutaneously in the flank with HCT-8 colon cancer pieces and intratumorally treated with TP-0903 (3.85 μ g/kg or 0.13 mg/kg) alone or in the presence of WIN55212-2 (2.5 mg/kg) every two days. Cisplatin was used as control group (5 mg/kg per week). The body weights of individual mice were detected.