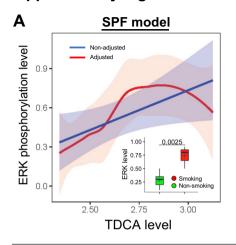
Supplementary Figure 4



В	Germ-free model			
ERK phosphorylation level	Non-adjusted Non-adjusted			
	2.0 2.4 2.8			
	TDCA level			

Group	# of mice	ρ	P
Non-smoking	7	0.79	0.03
Smoking	7	-0.01	0.99
$All_{non-adj}$	14	0.56	0.04
All adj	14	0.35	0.28

Group	# of mice	ρ	P
Non-smoking	7	-0.03	0.96
Smoking	6	0.27	0.82
All _{non-adj}	13	0.35	0.36
All_{adj}	13	0.05	0.89

Supplementary Figure 4. Correlation analysis between *ERK* phosphorylation and TDCA. The result showed positive correlation between *ERK* phosphorylation level and TDCA level in both SPF mice (AOM plus AOM+smoking group) **(A)** and germfree mice (GF-AOM plus GF-AOMS group) **(B)**. Pearson correlation was used to calculate the non-adjusted correlation. Partial's Spearman correlation was used to adjust the correlation by controlling the smoking parameter.