Overexpression of Mucin 1 suppresses the therapeutical efficacy of disulfiram against canine mammary tumor

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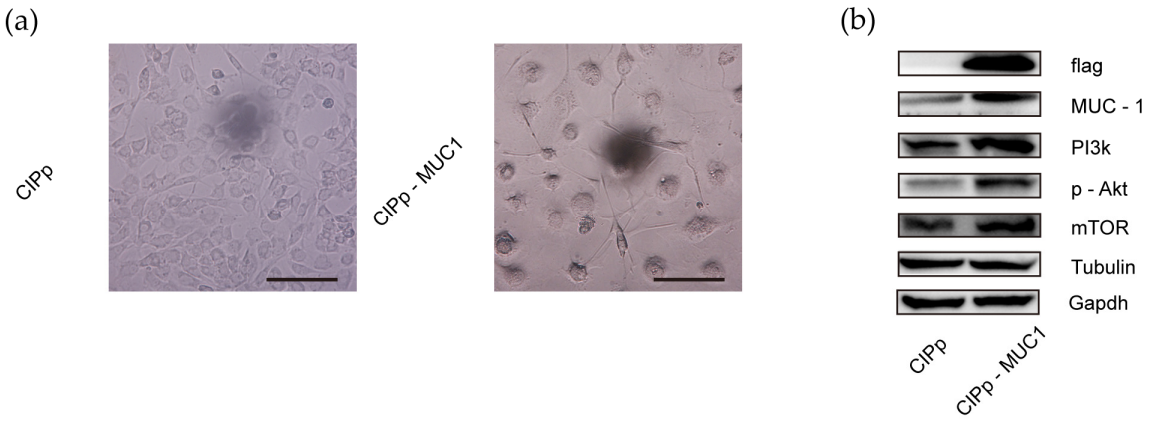


Figure S1. Validation of CIPp-MUC1 cell line. (a) Morphology or CIPp and CIPp-MUC1 cells under bright field microscope (bar= 50 μm). (b) Western blot analysis of MUC1, flag, PI3K, p-Akt, mTOR in CIPp or CIPp-MUC1 cells. Tubulin and Gapdh were set as internal control.

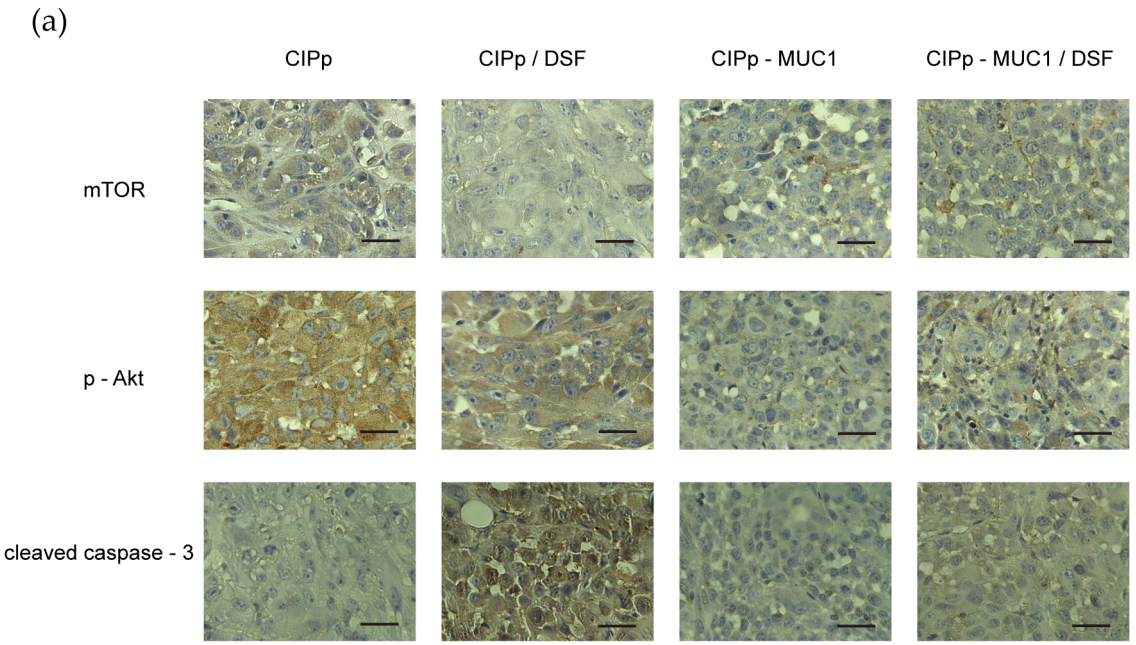


Figure S2. Immunohistochemical analysis of the effect of disulfiram on PIK3/Akt signal in xenograft tumors. (a) Immunohistochemical analysis of the level of mTOR, p-AKT and cleaved caspase-3. CIPp and CIPp-MUC1 xenograft tumors with or without 100 nM of disulfiram were compared. Brown color indicated positive signal. Bar=30 μm

(a)

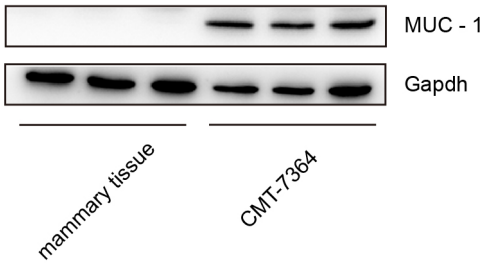


Figure S3. Western blot analysis of MUC1 in tumor formed by CMT-7364 or non-lactating mammary tissue. Gapdh was set as internal control.

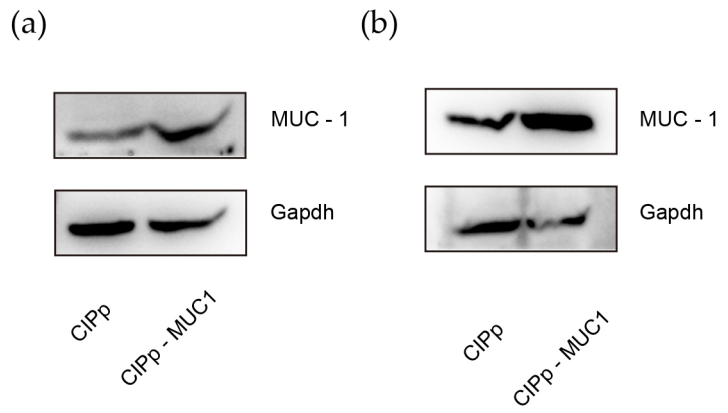
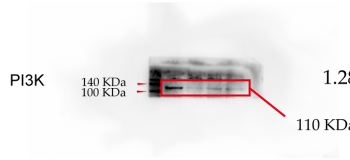


Figure S4. MUC-1 expression in different passages of CIPp-MUC1 cell line. (a) Western blot analysis of MUC1 in 10th generation of CIPp-MUC1 cells (right) and non-transfected CIPp cells (left). (b) Western blot analysis of MUC1 in 30th generation of CIPp-MUC1 cells (right) and non-transfected CIPp cells (left). Gapdh were set as internal control.

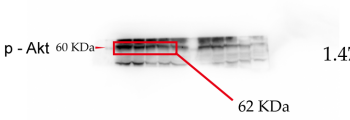
Original images of all Western blot figures

figure3 a

intensity ratio

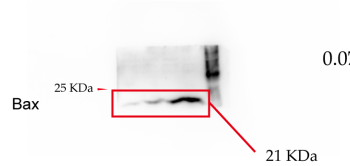


1.28 0.56 0.59 0.50

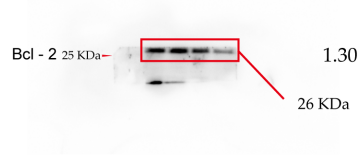


1.47 1.49 0.96 0.78

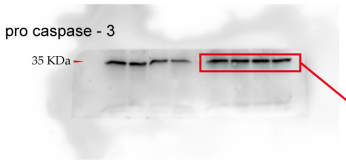
1.35 1.47 1.24 0.64

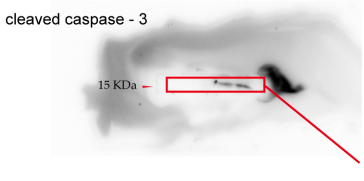


0.07 0.27 0.79 1.19

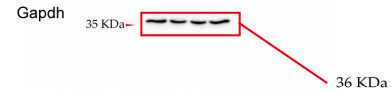


1.30 1.36 0.81 0.40





0.02 0.05 0.45 0.64



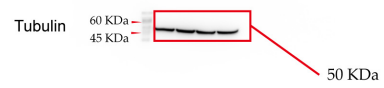
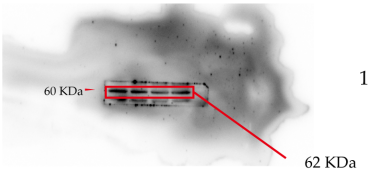


figure3 b

intensity ratio

1.21 0.95 1.07 1.09

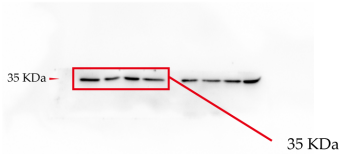


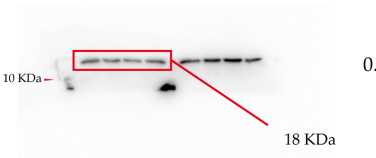
1.07 0.91 0.67 0.97

1.12 1.00 1.17 1.14

1.00 1.06 0.85 0.92

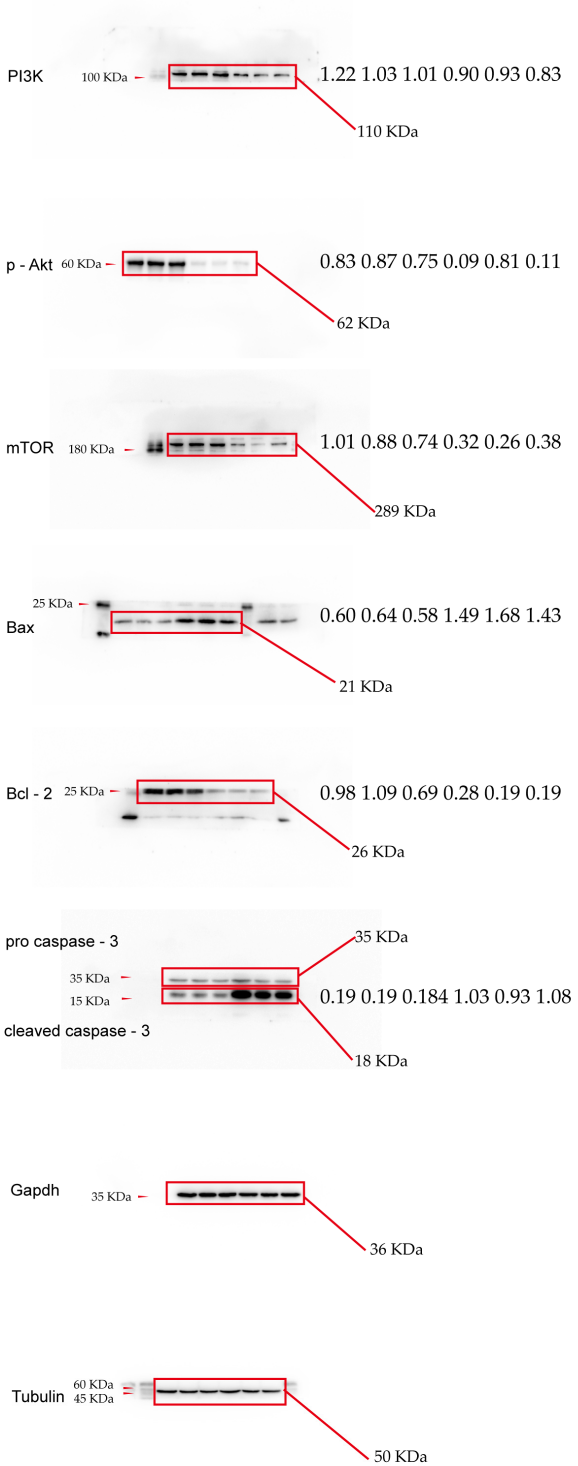
0.72 1.49 1.47 1.17





0.41 0.25 0.24 0.38

figure4 d



intensity ratio

1.22 1.03 1.01 0.90 0.93 0.83

0.83 0.87 0.75 0.09 0.81 0.11

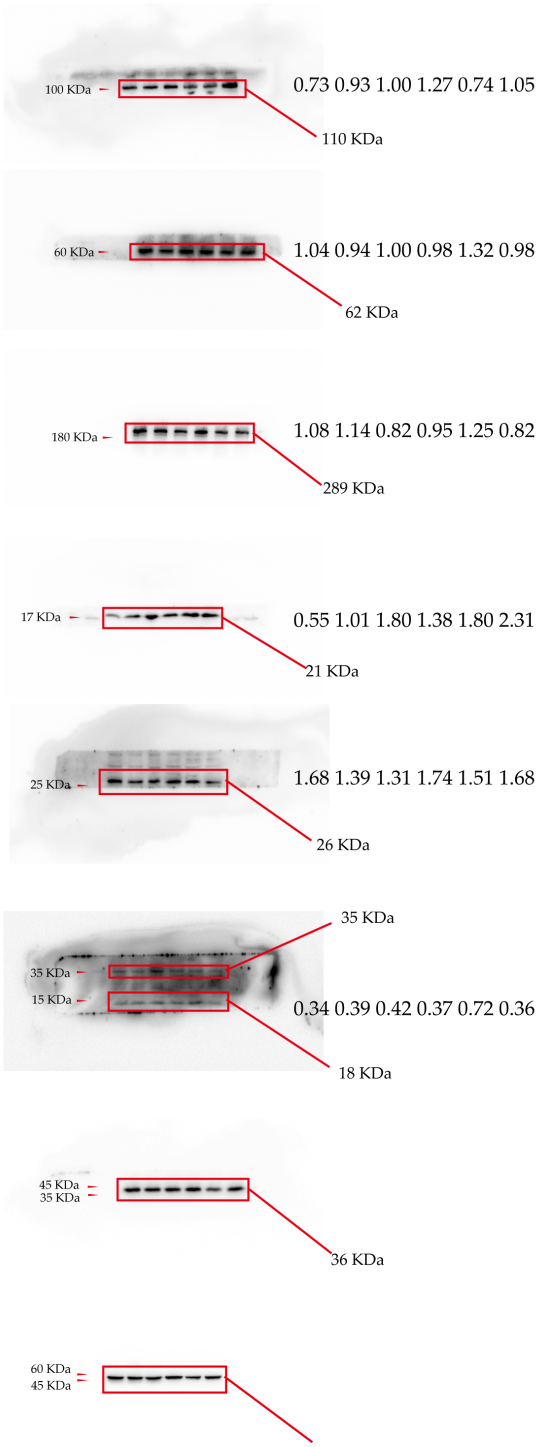
1.01 0.88 0.74 0.32 0.26 0.38

0.60 0.64 0.58 1.49 1.68 1.43

0.98 1.09 0.69 0.28 0.19 0.19

0.19 0.19 0.184 1.03 0.93 1.08

figure4 e



intensity ratio

0.73 0.93 1.00 1.27 0.74 1.05

1.04 0.94 1.00 0.98 1.32 0.98

1.08 1.14 0.82 0.95 1.25 0.82

0.55 1.01 1.80 1.38 1.80 2.31

1.68 1.39 1.31 1.74 1.51 1.68

0.34 0.39 0.42 0.37 0.72 0.36

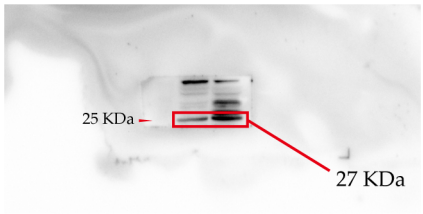
figureS 1

intensity ratio

flag

0.068 1.06

MUC - 1



0.41 1.02

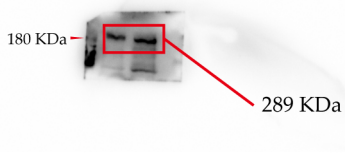
PI3k

1.08 1.10

p - Akt

0.40 0.87

mTOR



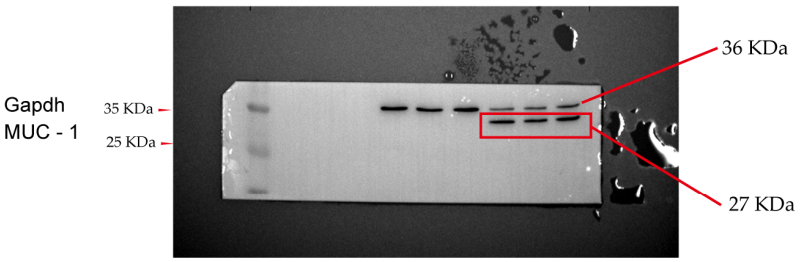
0.84 1.05

Tubulin

Gapdh

figureS 3

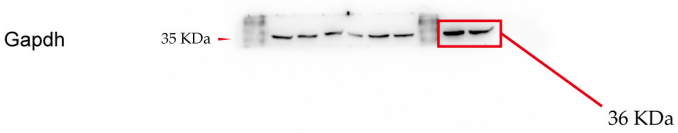
intensity ratio

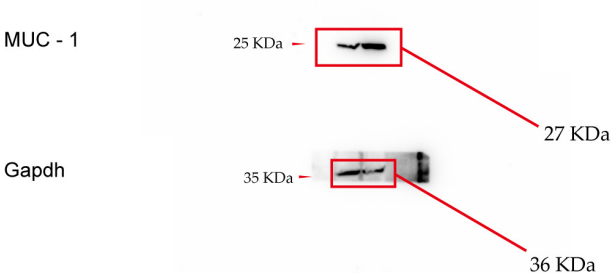


0.32 0.38 0.36 1.43 1.27

figureS 4

0.61 0.86





0.69 1.00