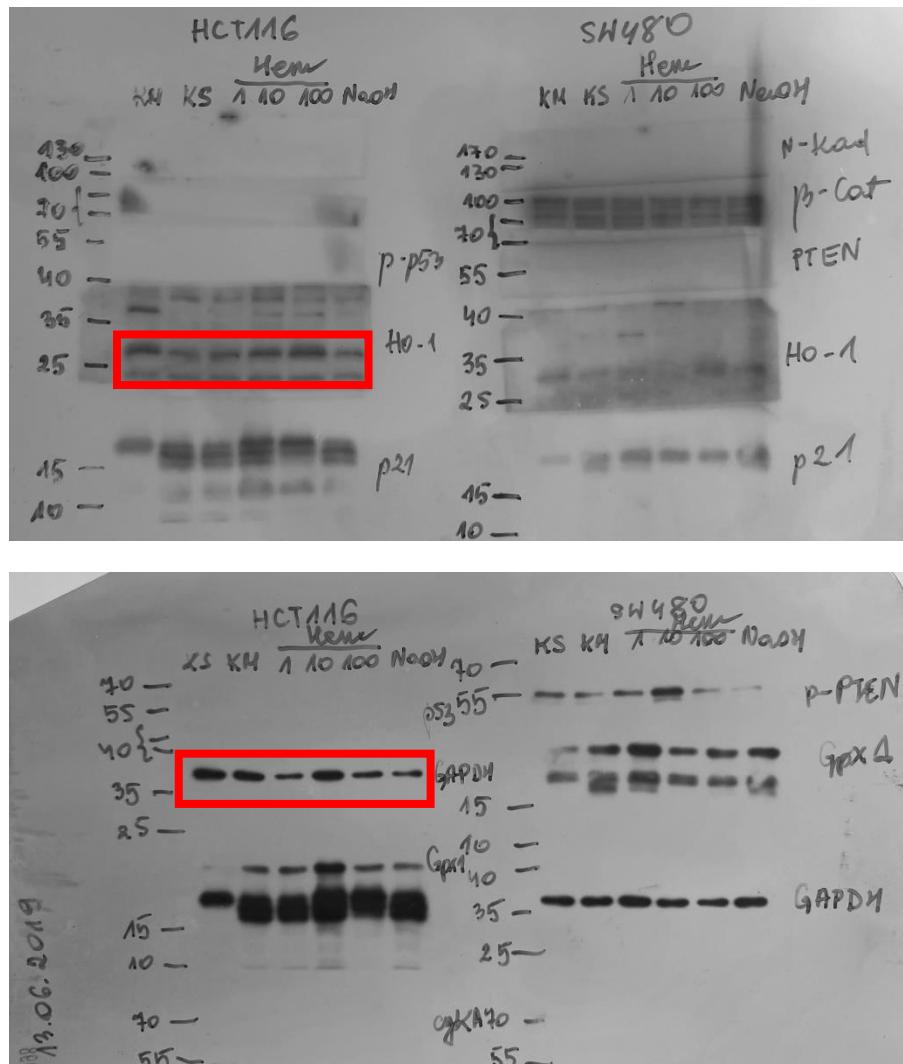


Representative blots showing raw data of protein expression analysis:

(1–11) in HCT116 cells treated with 2.5 µM IRINO and exposed to 1, 10 or 100 µM hemin: (1) HO-1; (2) CAT; (3) GPx-1; (4) cyclin A; (5) cyclin B; (6) p-cdc2; (7) p-Rb; (8) p21; (9) p-S6; (10) PARP-1; (11) γ-H2AX; (12–24) in HCT116 treated with 2.5 µM IRINO and exposed to 5 or 10 µM H2O2 and collected after 4th and 7th days of the experiment: (12) HO-1; (13) CAT; (14) GPx-1; (15) cyclin A; (16) cyclin B; (17) p-cdc2; (18) p-Rb; (19) p21; (20) p-S6; (21) p53; (22) E-cadherin; (23) Snail; (24) Nanog; (25–37) in HCT116 cells treated with 2.5 µM IRINO and exposed to 100 µM hemin, where antioxidative enzymes: HO-1, CAT or GPx-1 were silenced with use of siRNAs: (25) HO-1; (26) CAT; (27) GPx-1; (28) cyclin A; (29) cyclin B; (30) p-cdc2; (31) pRb; (32) p21; (33) p-S6; (34) PARP-1; (35) E-cadherin; (36) Snail; (37) Nanog; (38–51) in HCT116 cells treated with 2.5 µM IRINO and exposed to 100 µM hemin, where CAT was silenced with use of siRNAs, cells were cultured in normoxia or hypoxia: (38) HO-1; (39) CAT; (40) GPx-1; (41) cyclin A; (42) cyclin B; (43) p-cdc2; (44) p-Rb; (45) p21; (46) p-S6; (47) PARP-1; (48) p53; (49) E-cadherin; (50) Snail; (51) Nanog.



KM = Untreated Control

KS = Irinotecan

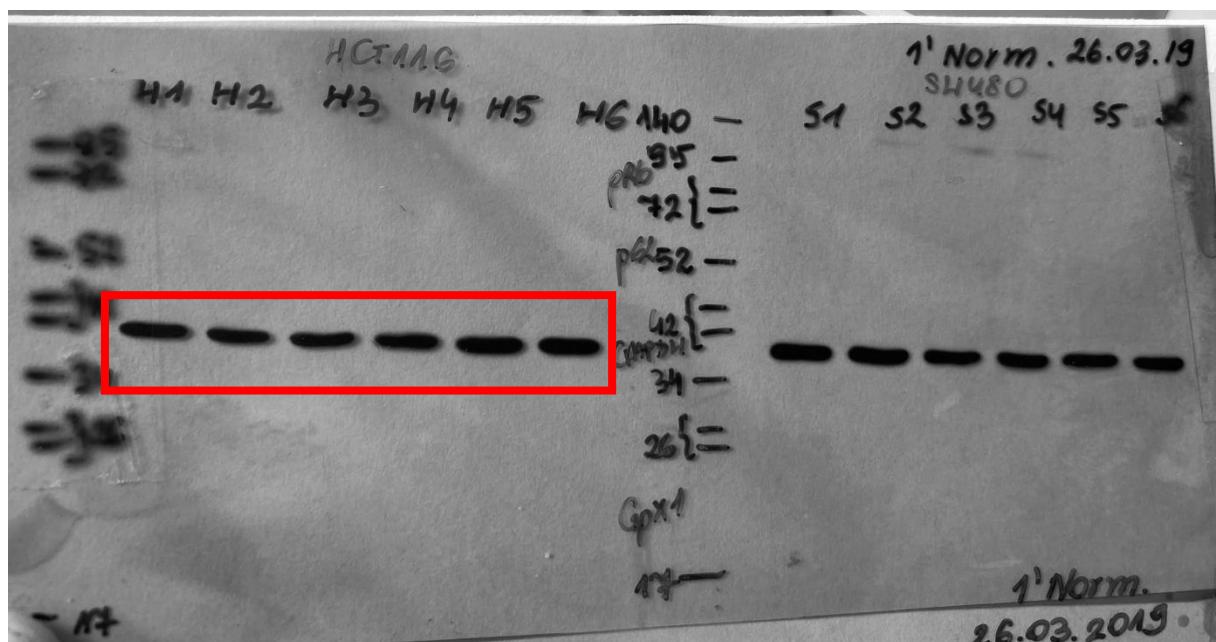
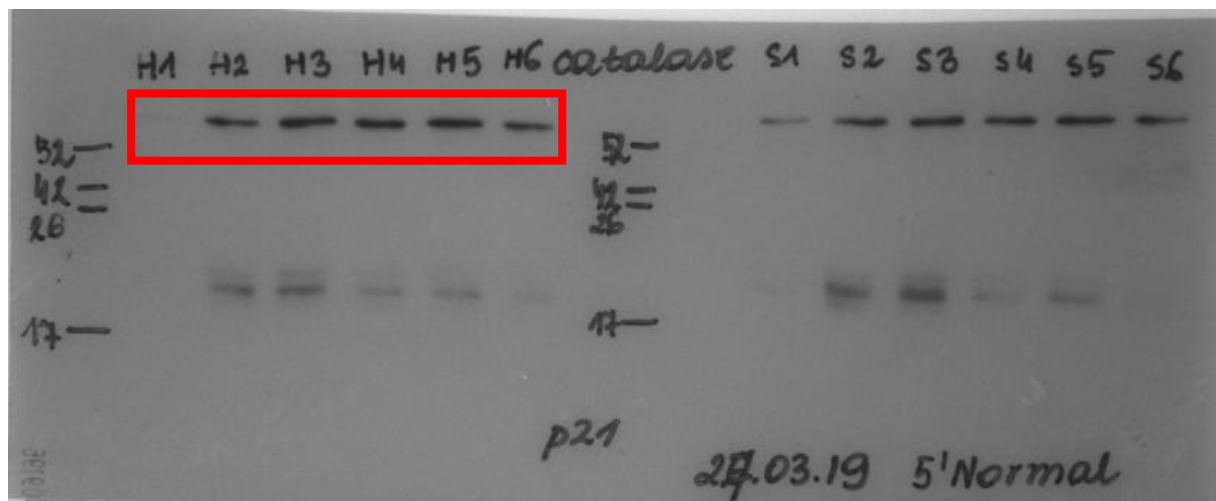
K3 – Irinotecan
1 = Irinotecan + 1 μM Hemin

1 = Irinotecan + 1 μ M Hemin

10 = Irinotecan + 10 μ M Hemin

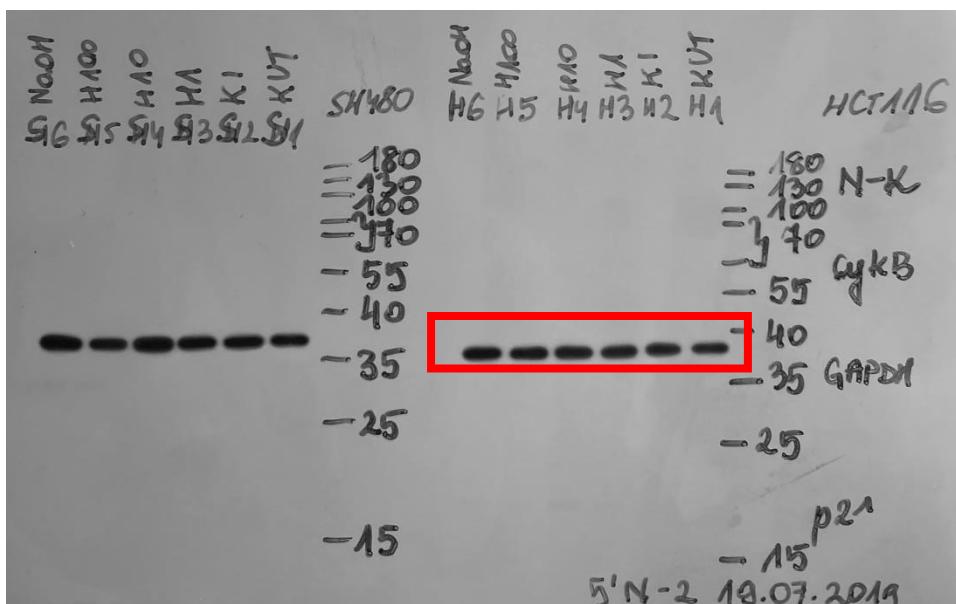
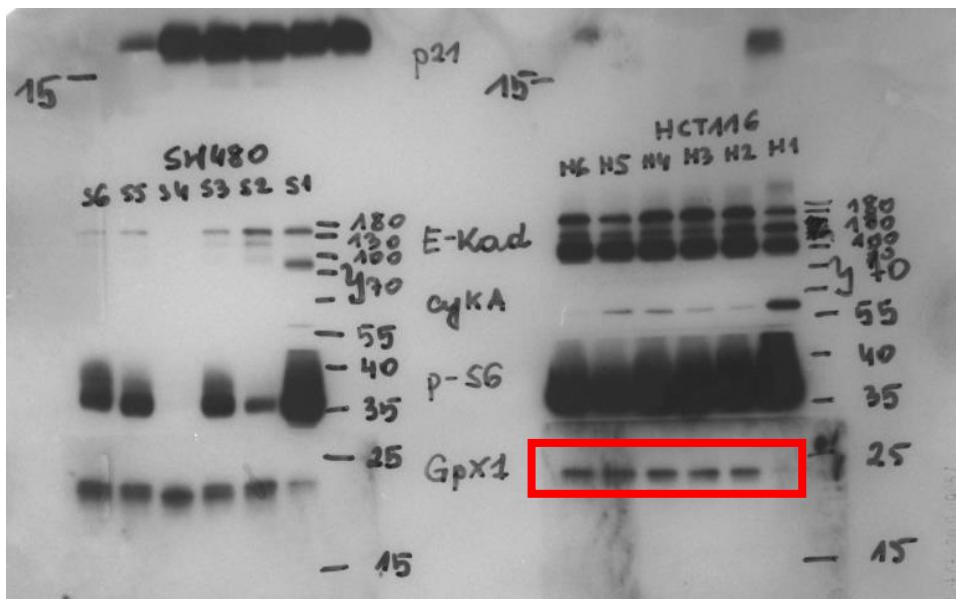
100 mg/m² Irinotecan + 100 µM NaOH – Irinotecan + NaOH

Fig. A.II.1



H1 – Untreated Control
 H2 – Irinotecan
 H3 – Irinotecan + 1 uM Hemin
 H4 – Irinotecan + 10 uM Hemin
 H5 – Irinotecan + 100 uM Hemin
 H6 – Irinotecan + NaOH

Fig. A.II.2



H1 – Untreated Control

H2 – Irinotecan

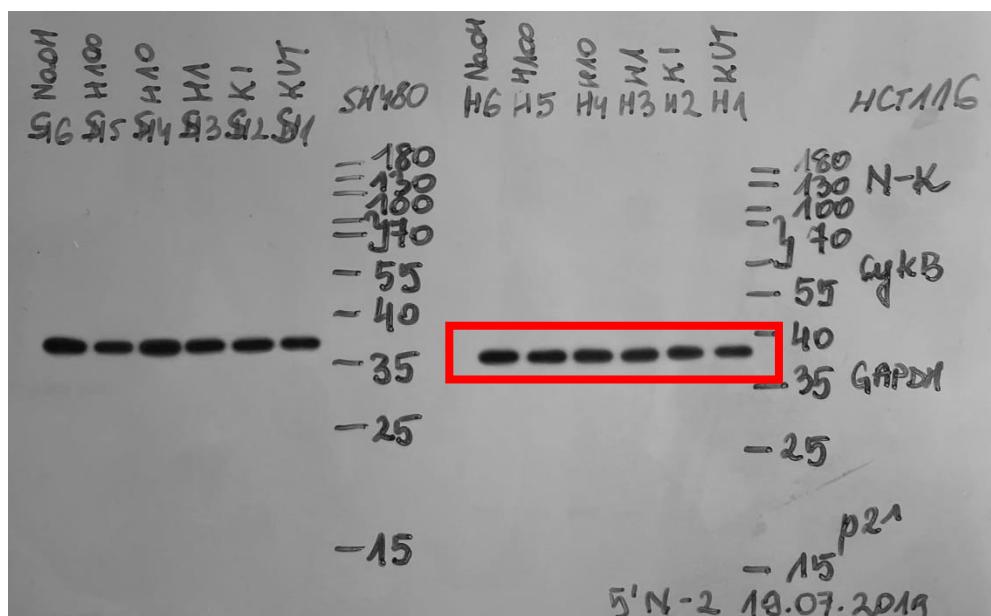
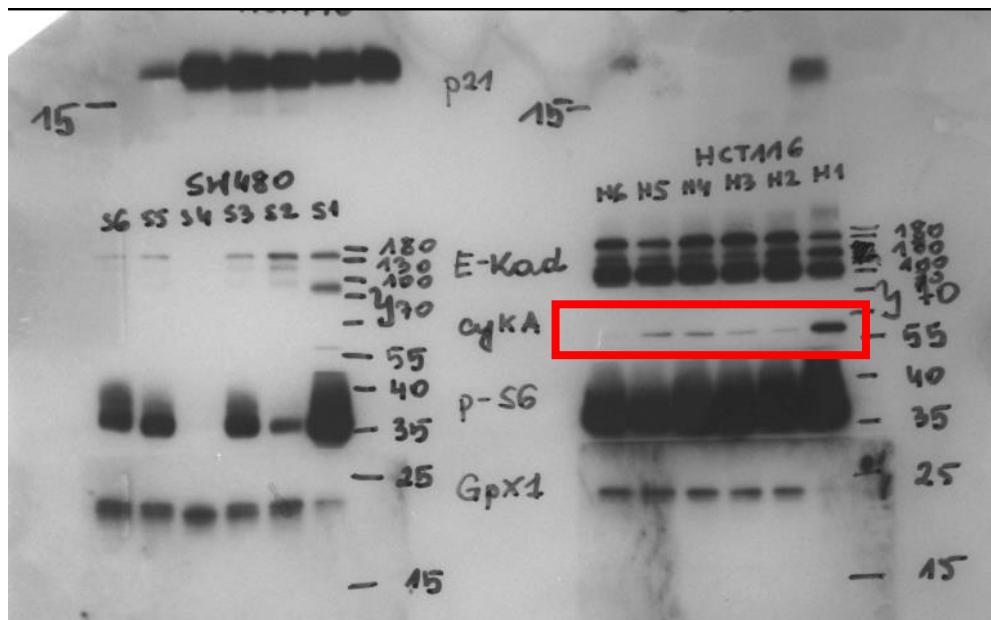
H3 – Irinotecan + 1 uM Hemin

H4 – Irinotecan + 10 uM Hemin

H5 – Irinotecan + 100 uM Hemin

H6 – Irinotecan + NaOH

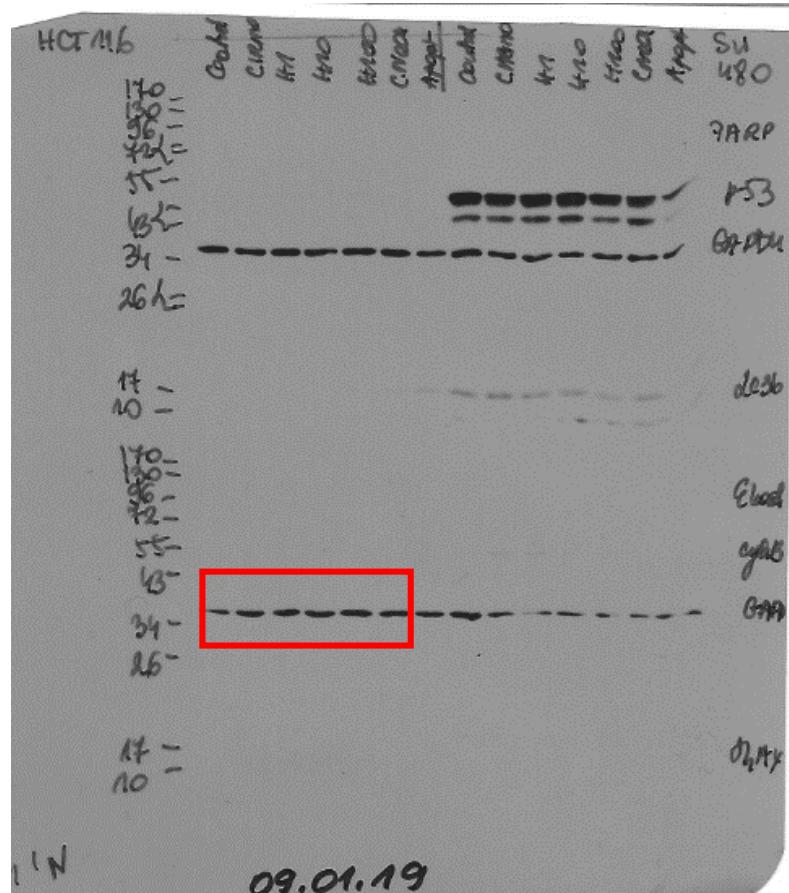
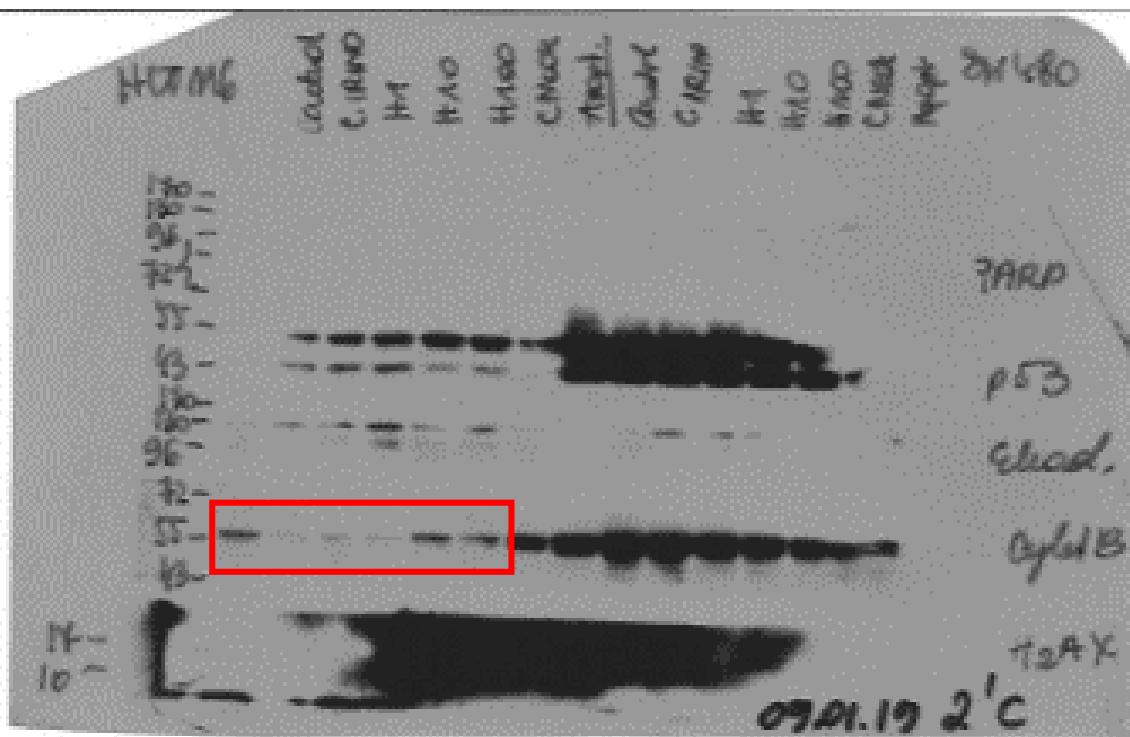
Fig. A.II.3



- H1 – Untreated Control
- H2 – Irinotecan
- H3 – Irinotecan + 1 uM Hemin
- H4 – Irinotecan + 10 uM Hemin
- H5 – Irinotecan + 100 uM Hemin
- H6 – Irinotecan + NaOH

Fig. A.II.4

cyclin B



KM – Untreated Control

KS – Irinotecan

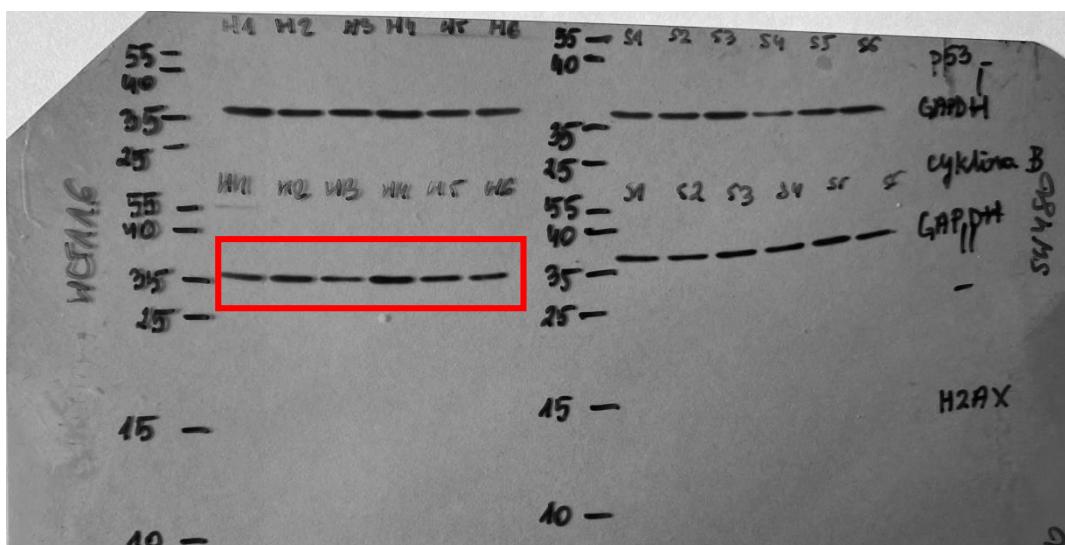
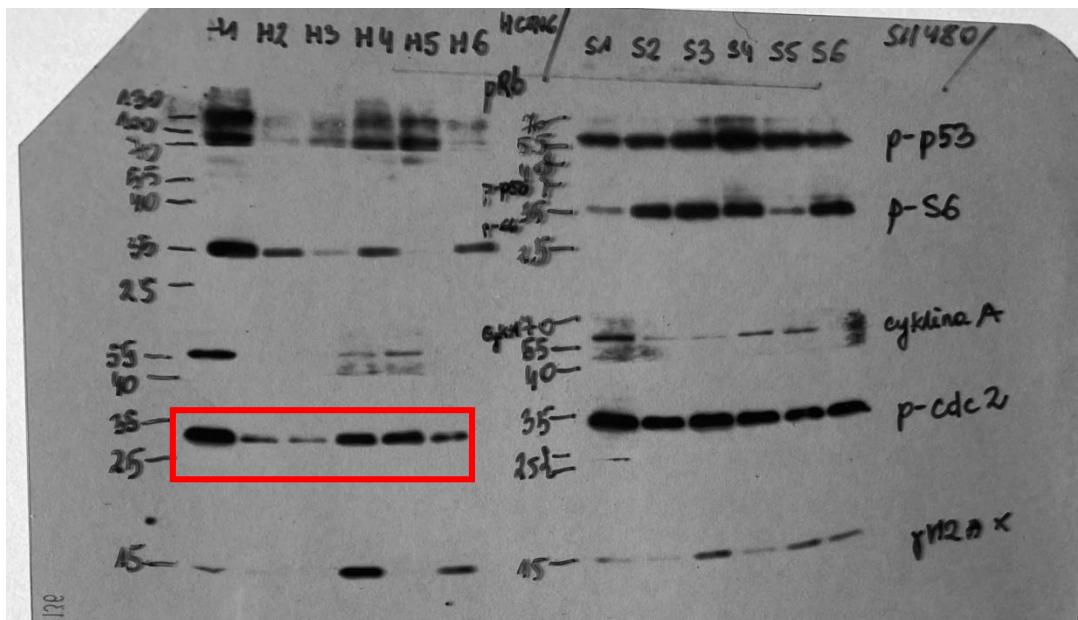
1 – Irinotecan + 1 uM Hemin

10 – Irinotecan + 10 uM Hemin

100 – Irinotecan + 100 uM Hemin

NaOH – Irinotecan + NaOH

Fig. A.II.5



H1 – Untreated Control

H2 – Irinotecan

H3 – Irinotecan + 1 uM Hemin

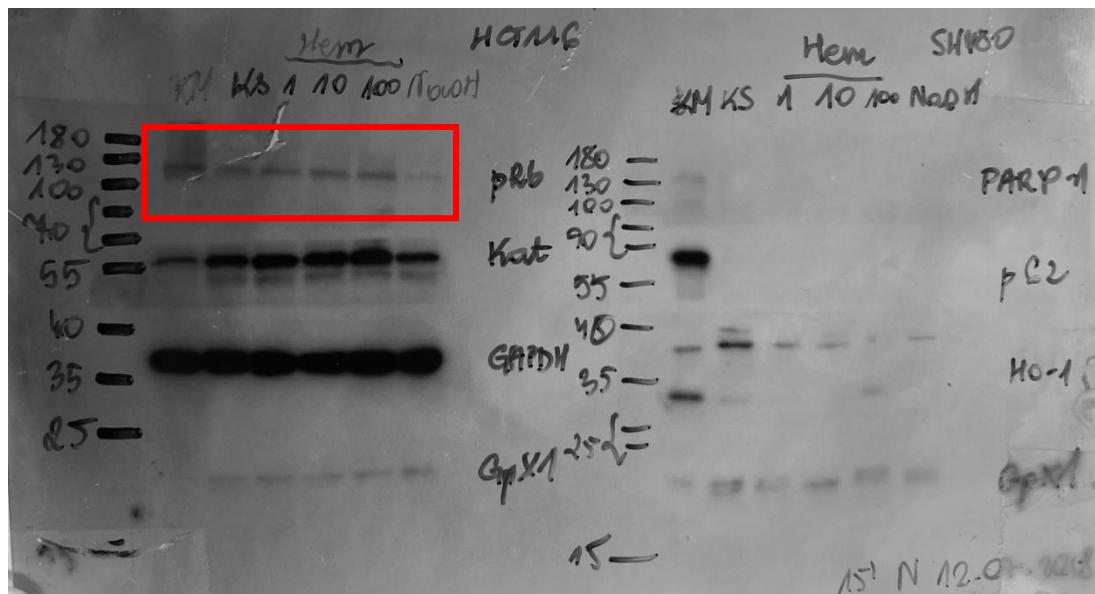
H4 – Irinotecan + 10 uM Hemin

H5 – Irinotecan + 100 uM Hemin

H6 – Irinotecan + NaOH

Fig. A.II.6

p-Rb



KM – Untreated Control

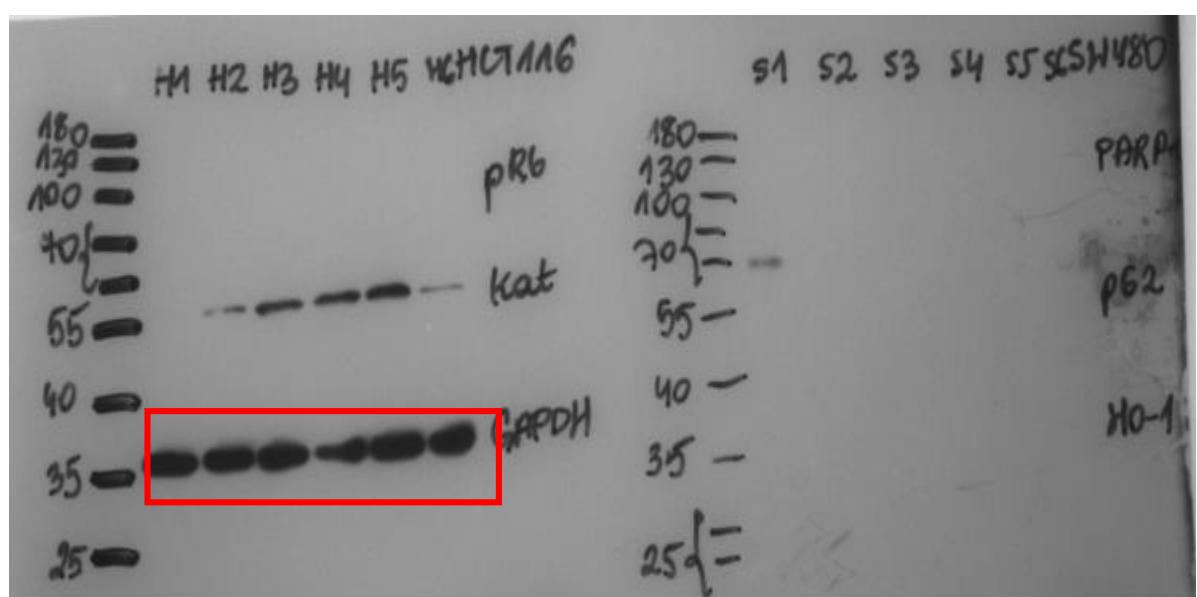
KS – Irinotecan

1 – Irinotecan + 1 uM Hemin

10 – Irinotecan + 10 uM Hemin

100 – Irinotecan + 100 uM Hemin

NaOH – Irinotecan + NaOH



H1 – Untreated Control

H2 – Irinotecan

H3 – Irinotecan + 1 uM Hemin

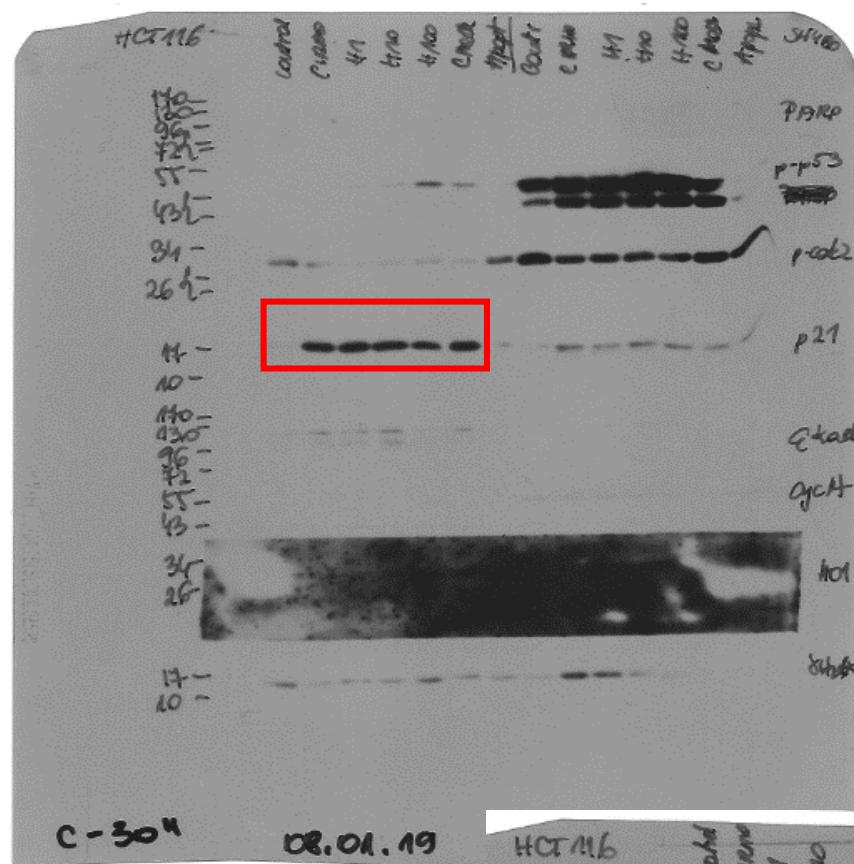
H4 – Irinotecan + 10 uM Hemin

H5 – Irinotecan + 100 uM Hemin

H6 – Irinotecan + NaOH

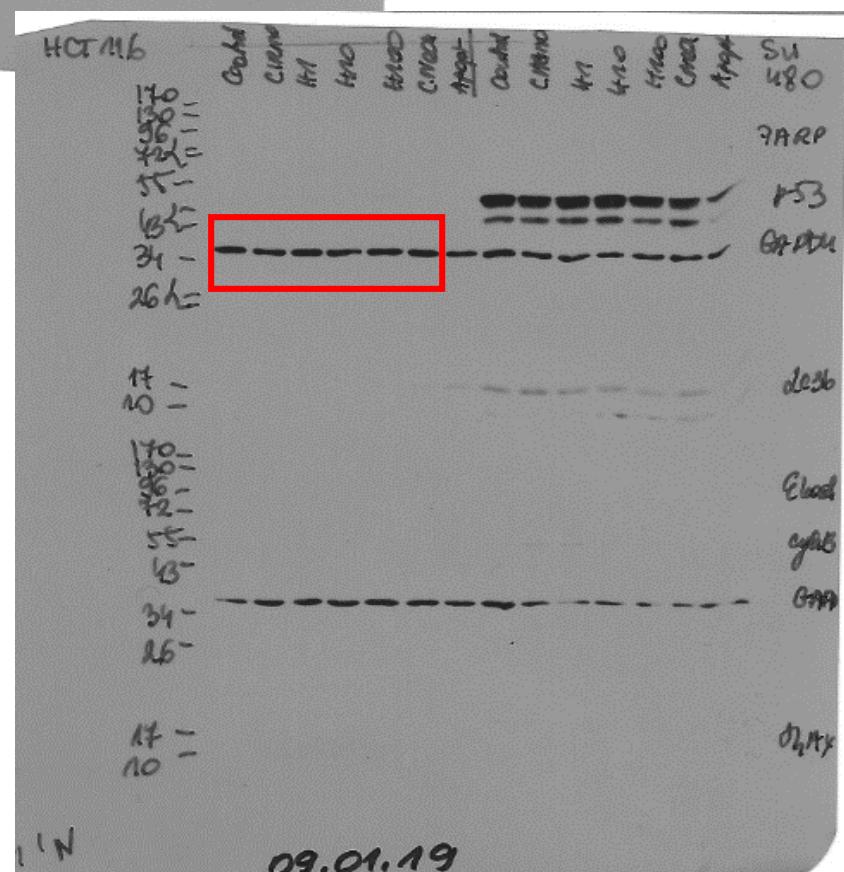
Fig. A.II.7

p21



C - 30"

08.01.19



control – Untreated Control

C IRINO – Irinotecan

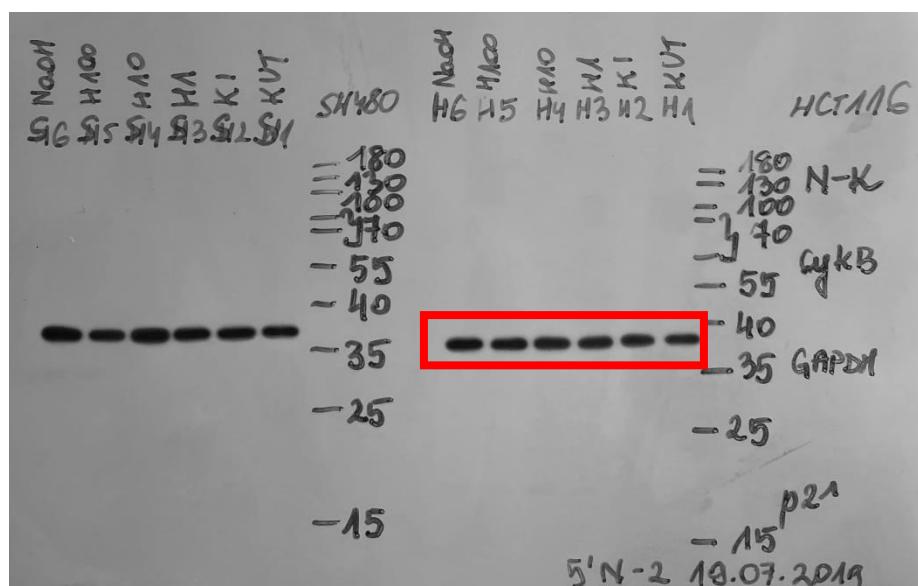
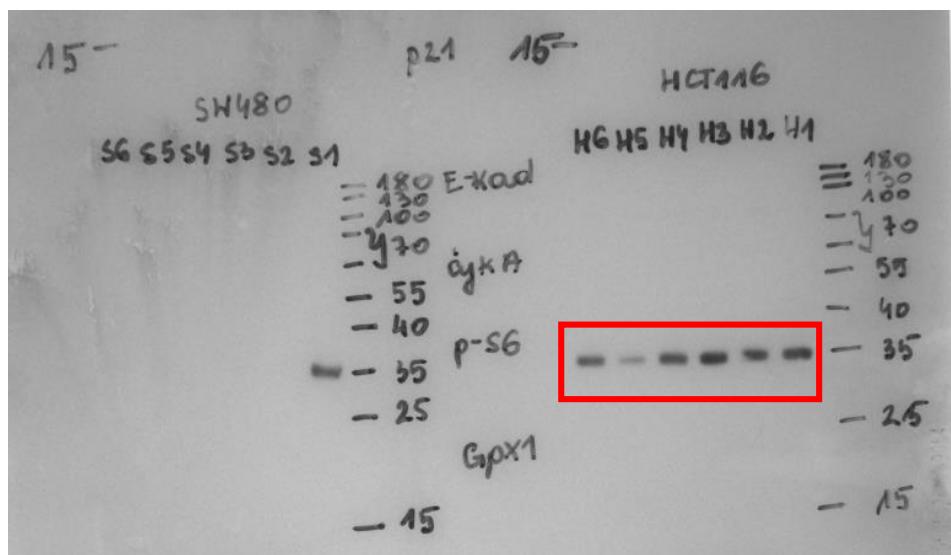
H1 – Irinotecan + 1 uM Hemin

H10 – Irinotecan + 10 uM Hemin

H100 – Irinotecan + 100 uM Hemin

NaOH – Irinotecan + NaOH

Fig. A.II.8



H1 – Untreated Control

H2 – Irinotecan

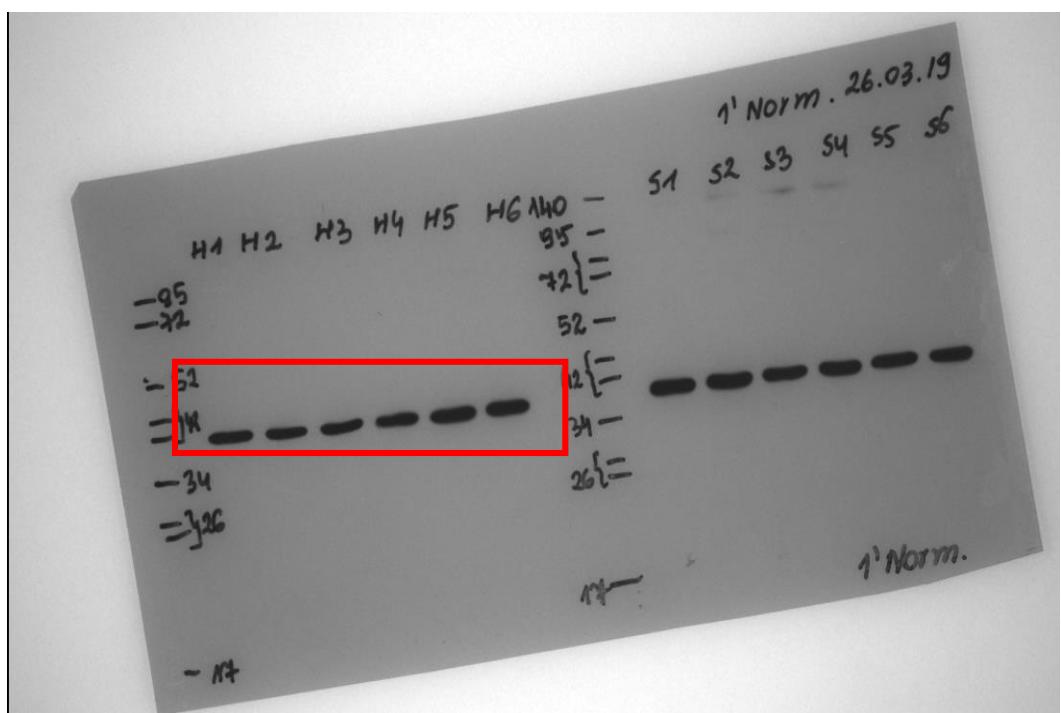
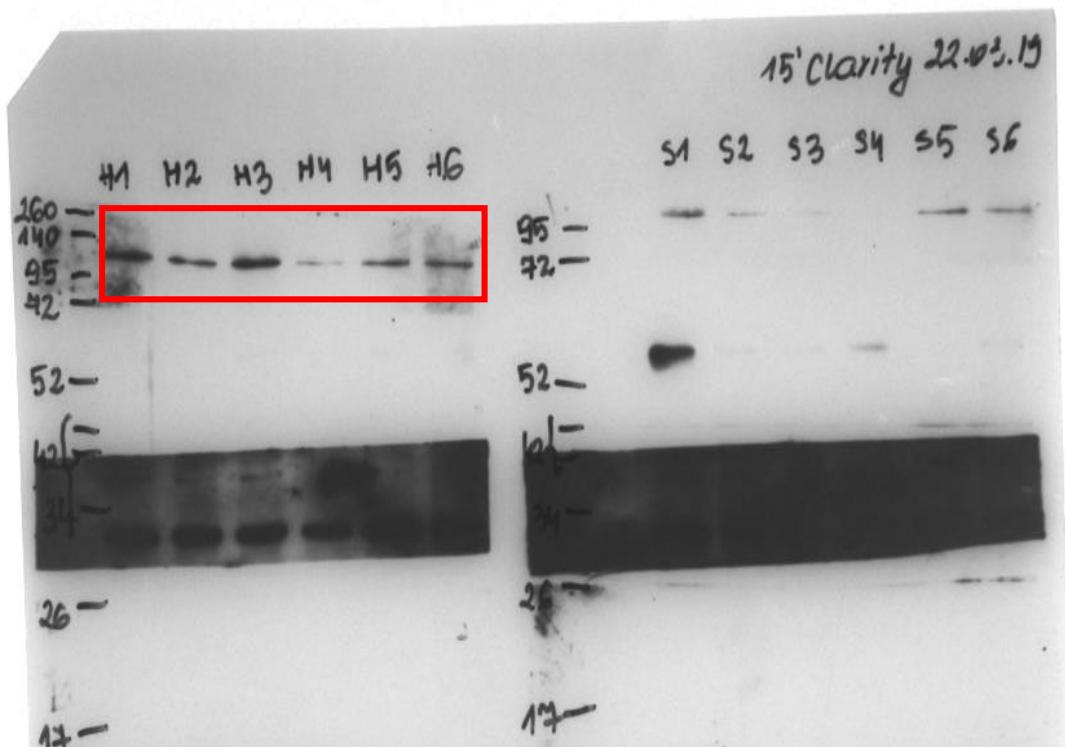
H3 – Irinotecan + 1 uM Hemin

H4 – Irinotecan + 10 uM Hemin

H5 – Irinotecan + 100 uM Hemin

H6 – Irinotecan + NaOH

Fig. A.II.9



H1 – Untreated Control

H2 – Irinotecan

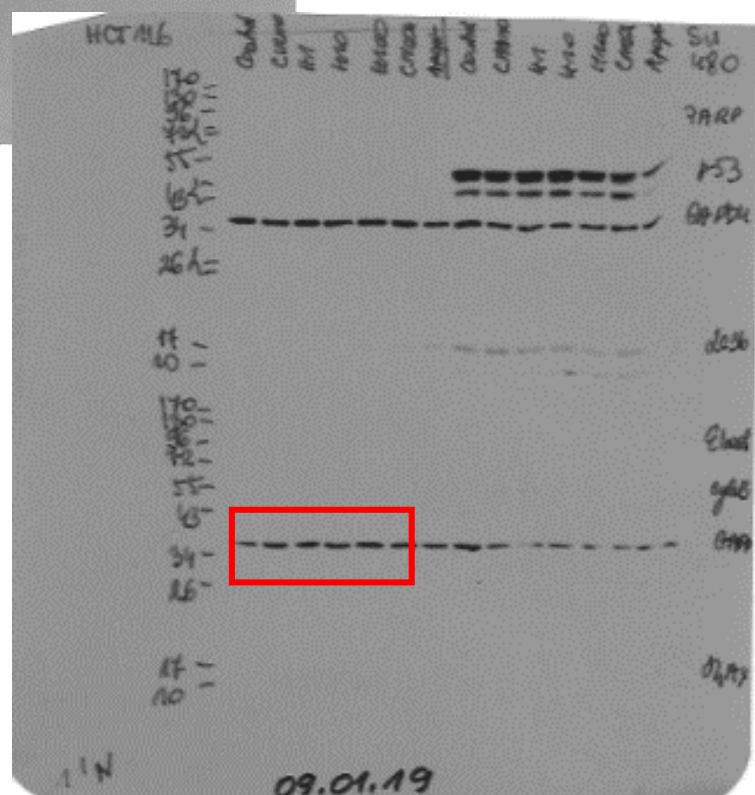
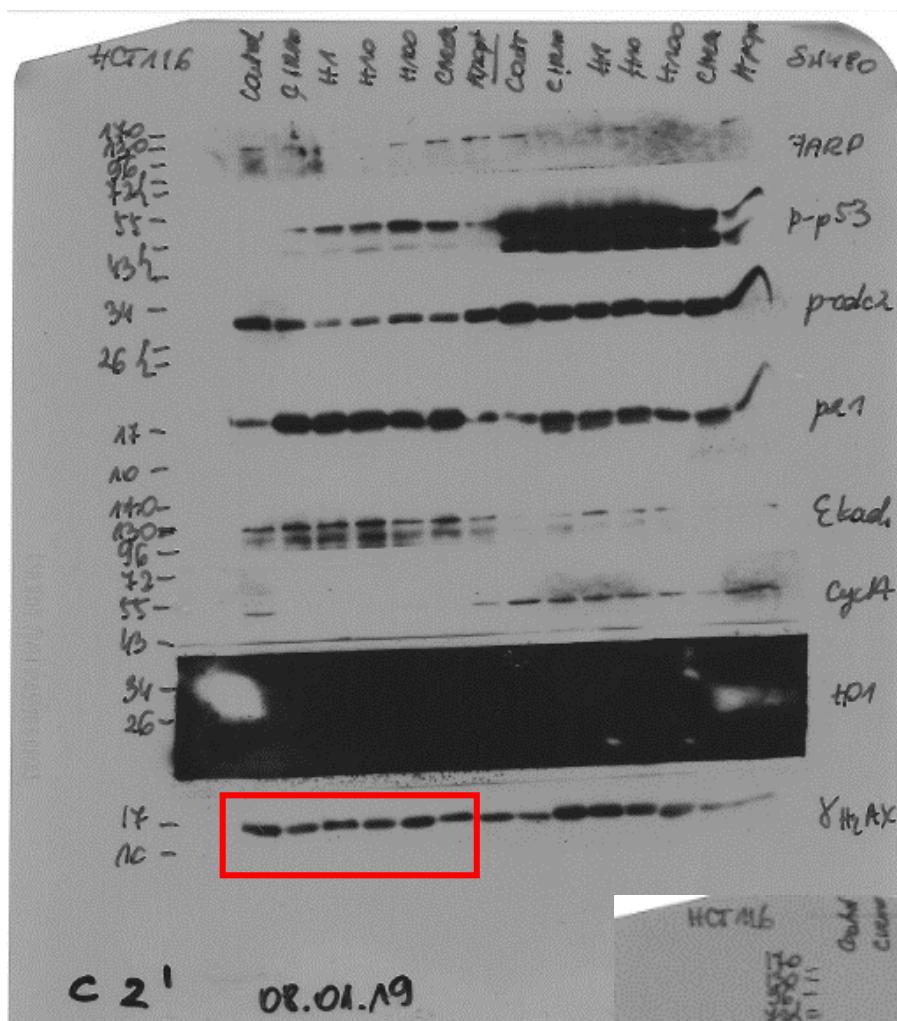
H3 – Irinotecan + 1 uM Hemin

H4 – Irinotecan + 10 uM Hemin

H5 – Irinotecan + 100 uM Hemin

H6 – Irinotecan + NaOH

Fig. A.II.10

γ -H2AX

control – Untreated Control

C IRINO – Irinotecan

H1 – Irinotecan + 1 uM Hemin

H10 – Irinotecan + 10 uM Hemin

H100 – Irinotecan + 100 uM Hemin

NaOH – Irinotecan + NaOH

Fig. A.II.11

HO-1

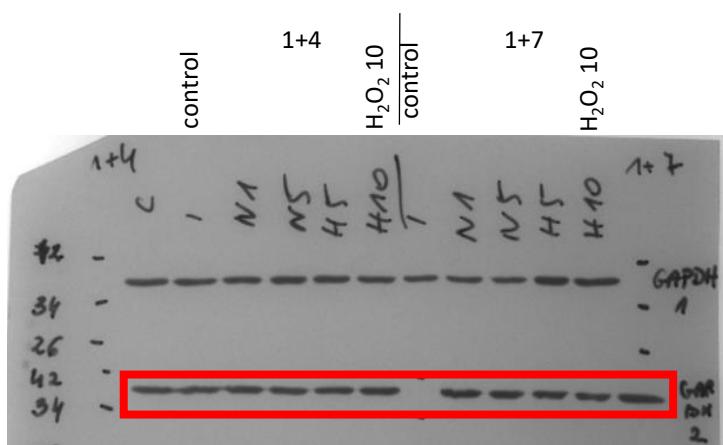
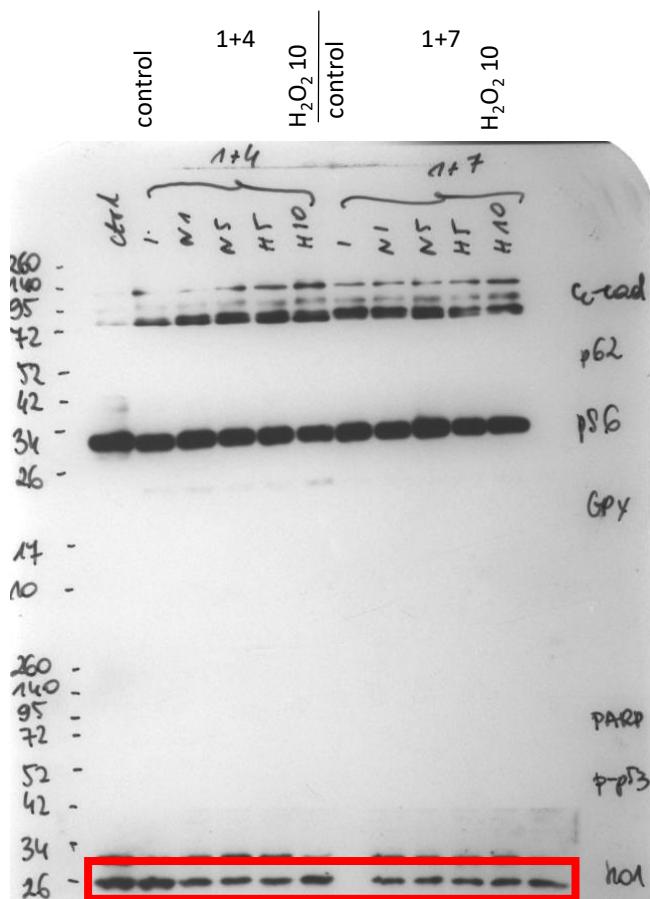


Fig. A.II.12

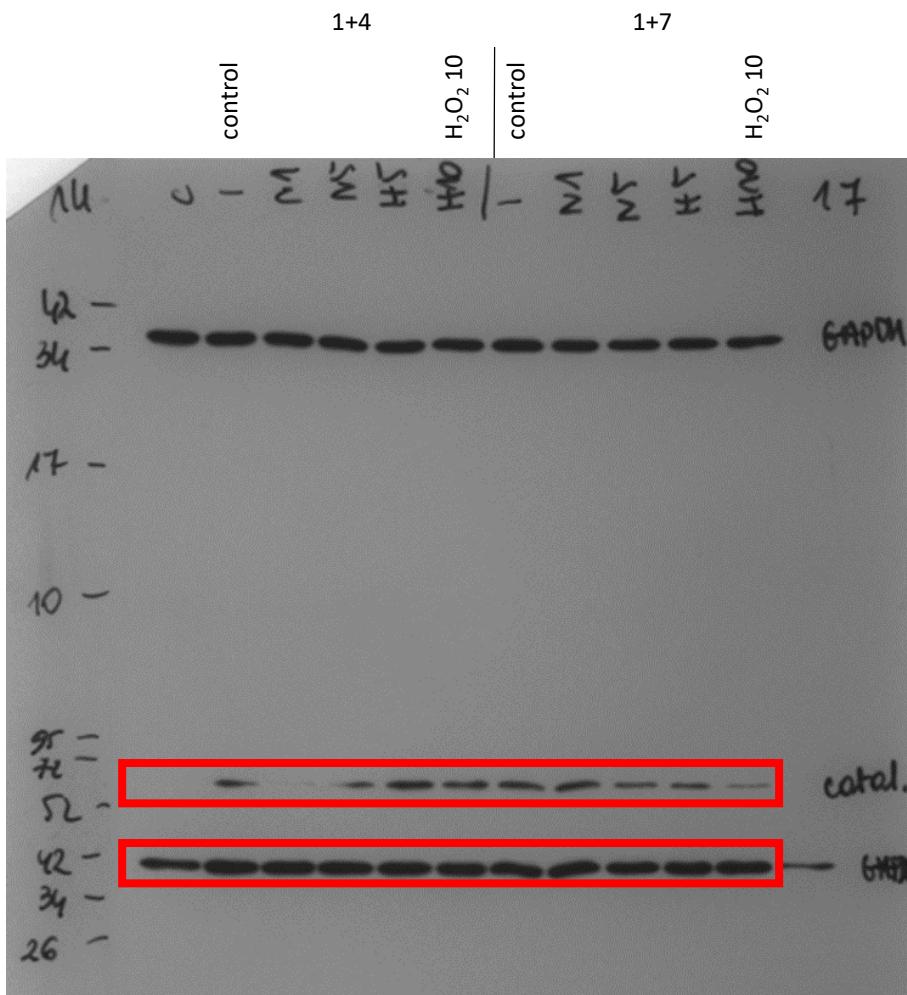


Fig. A.II.13

GPx-1

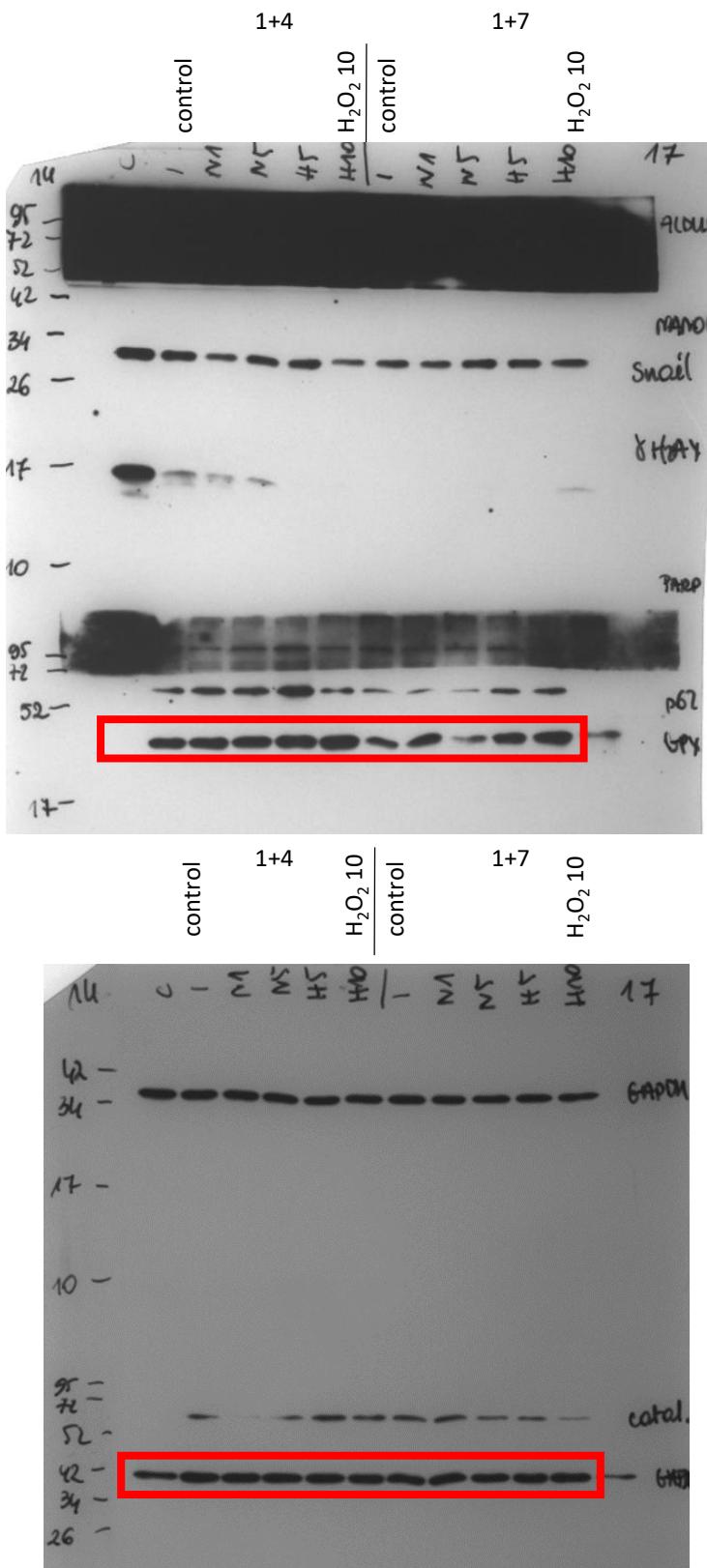


Fig. A.II.14

cyclin A

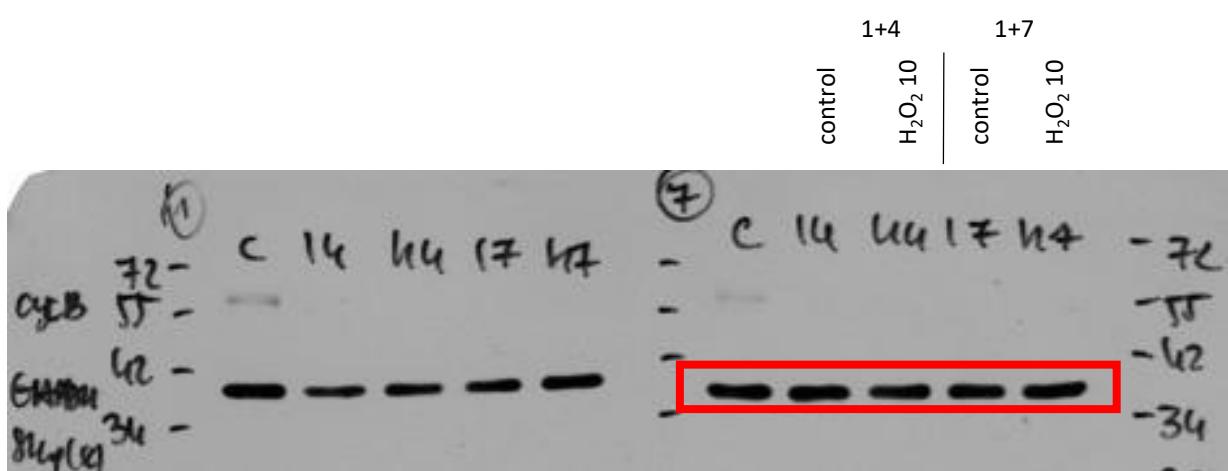
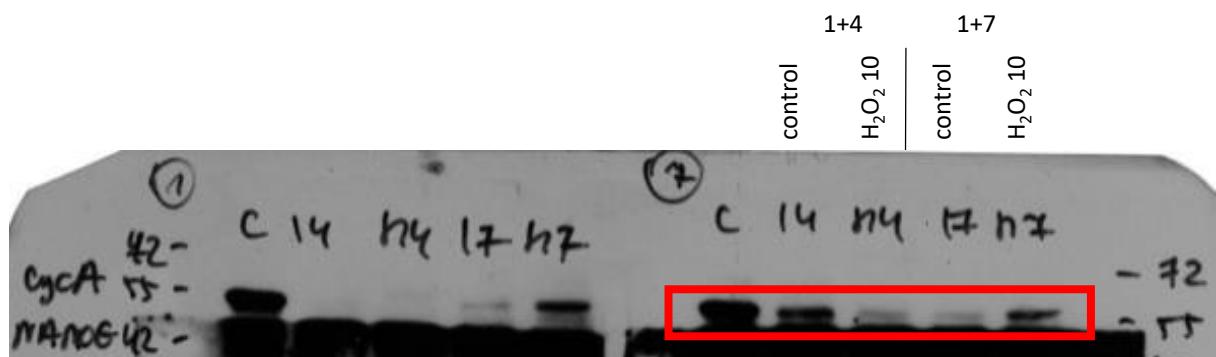


Fig. A.II.15

cyclin B

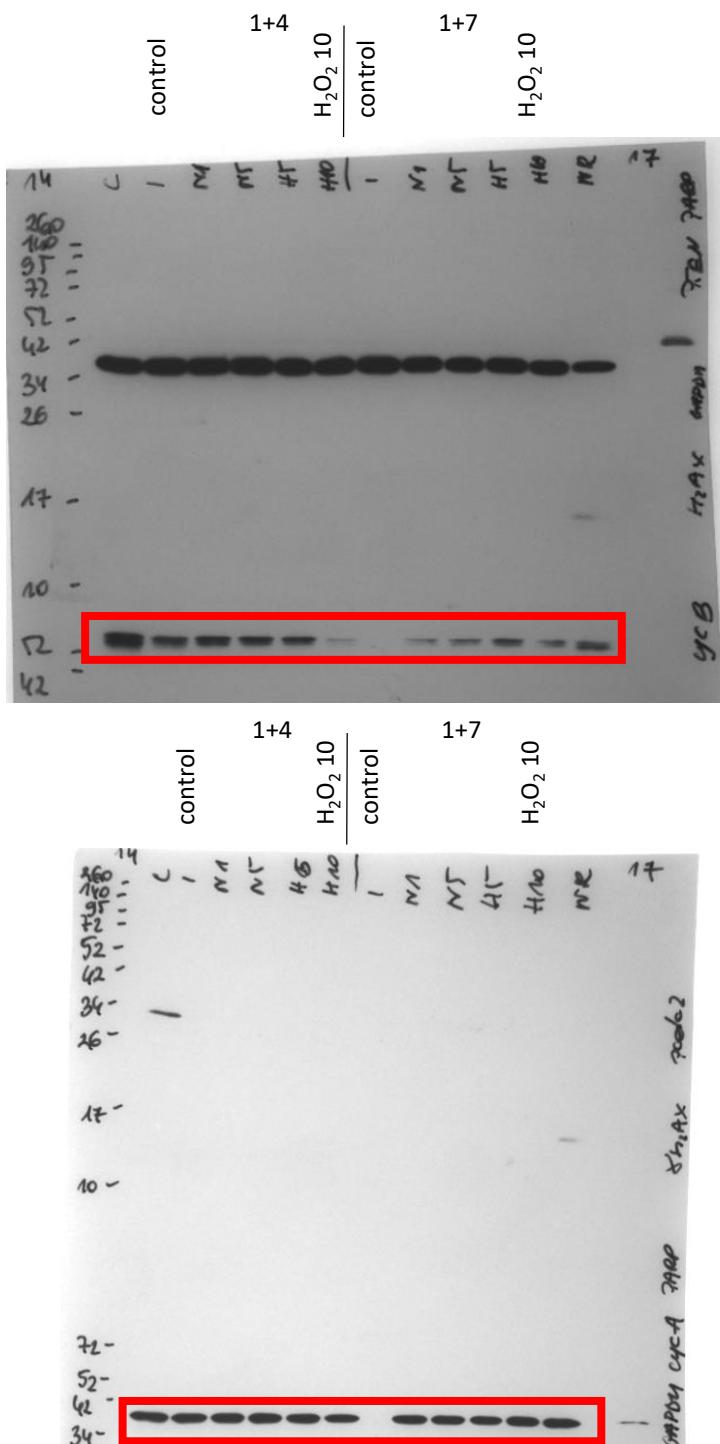


Fig. A.II.16

p-cdc2

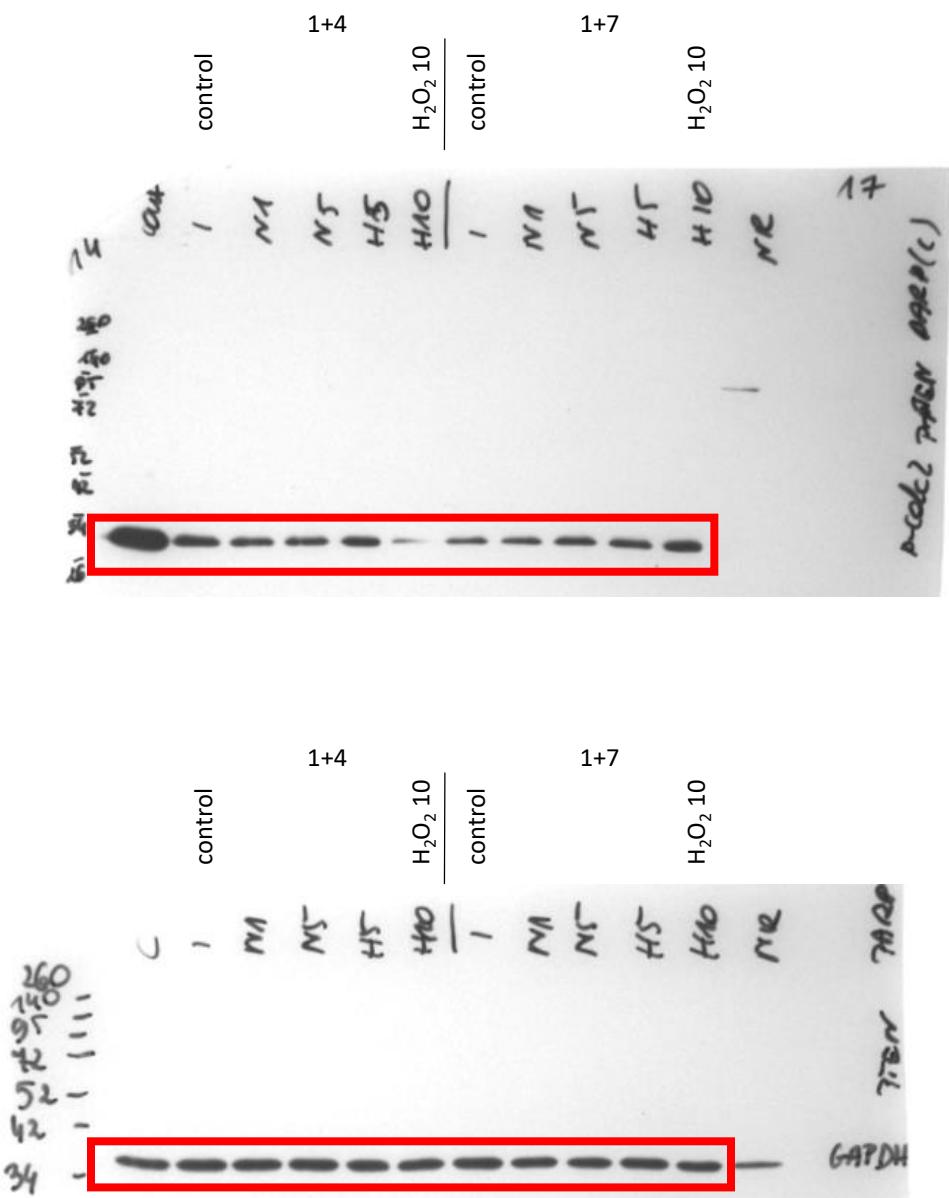


Fig. A.II.17

p-Rb

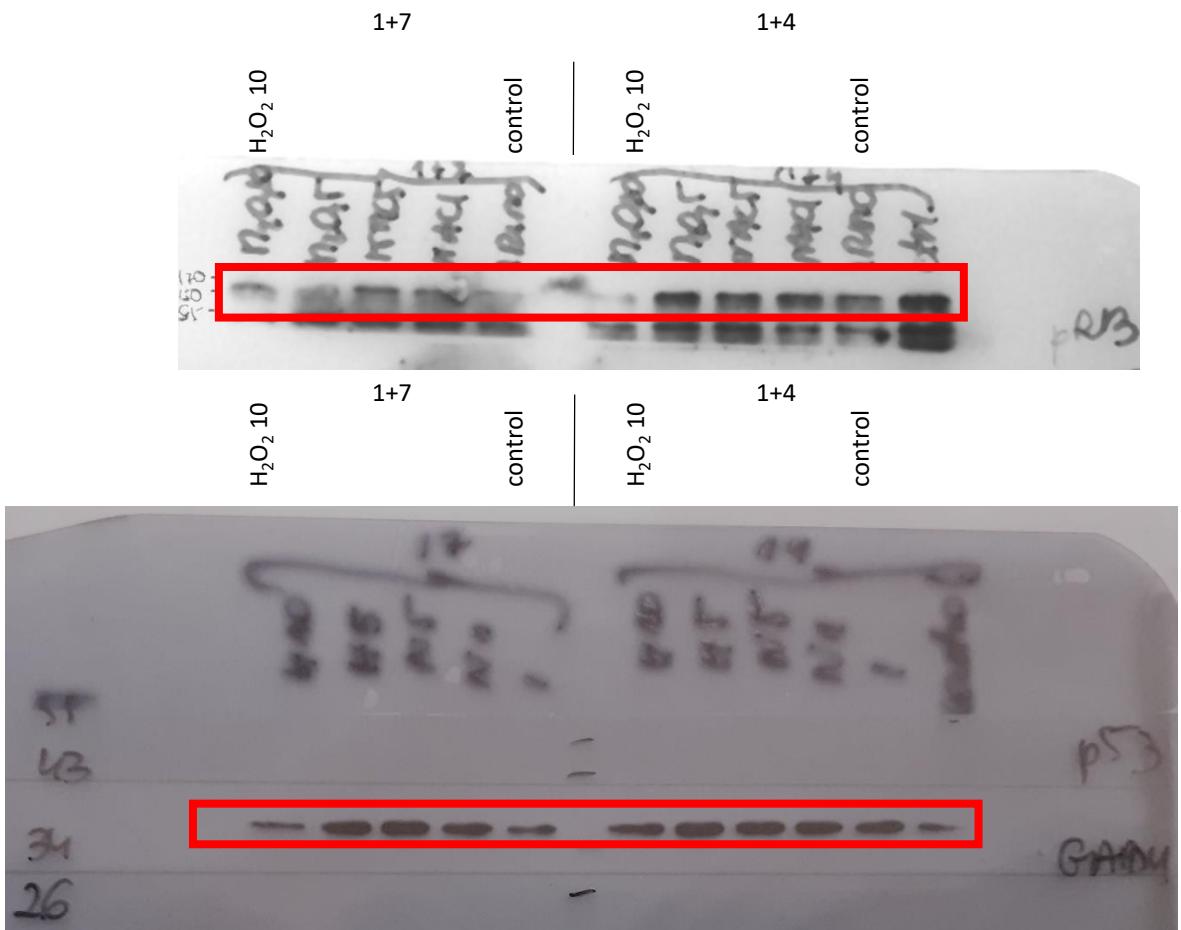


Fig. A.II.18

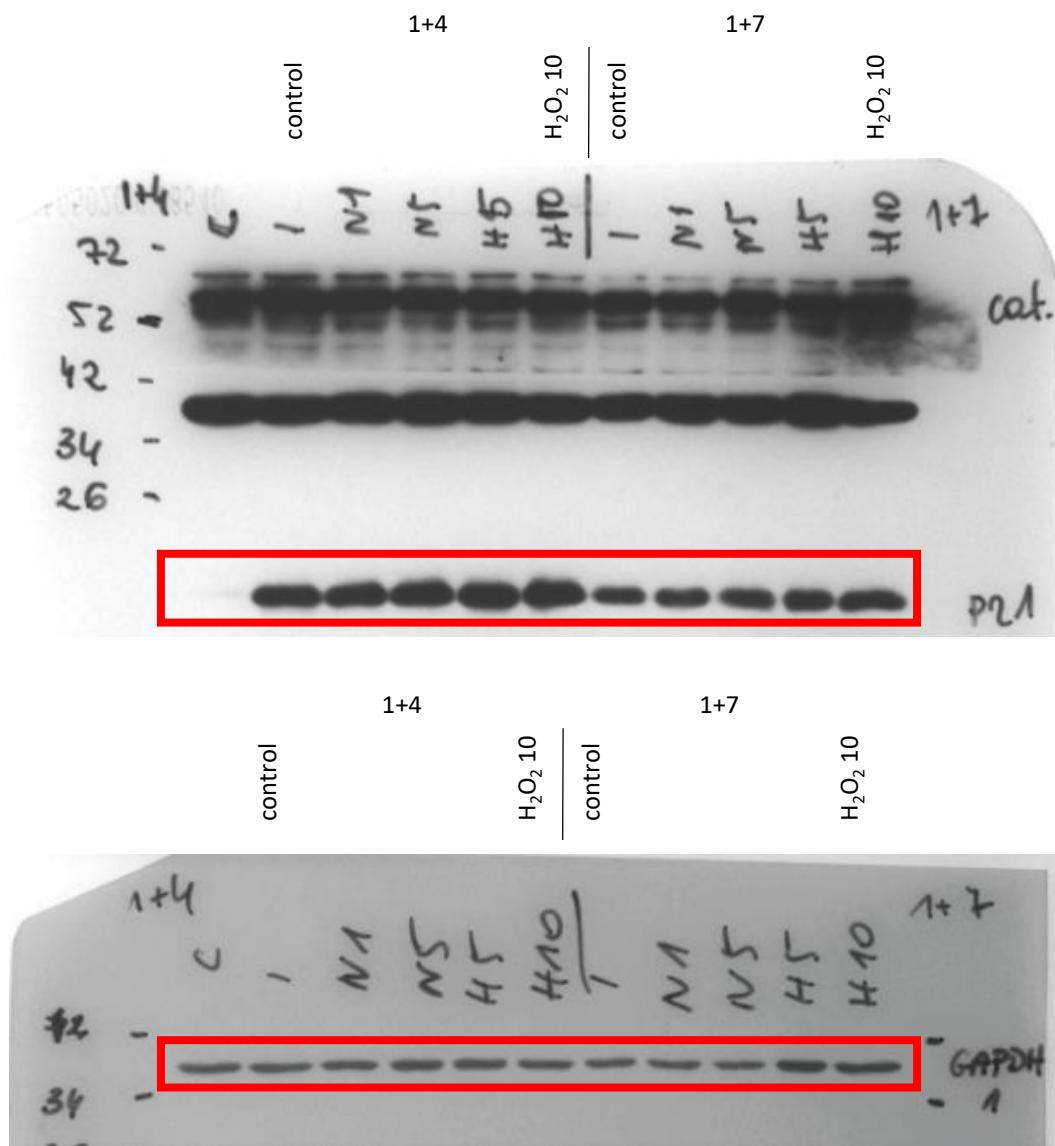


Fig. A.II.19

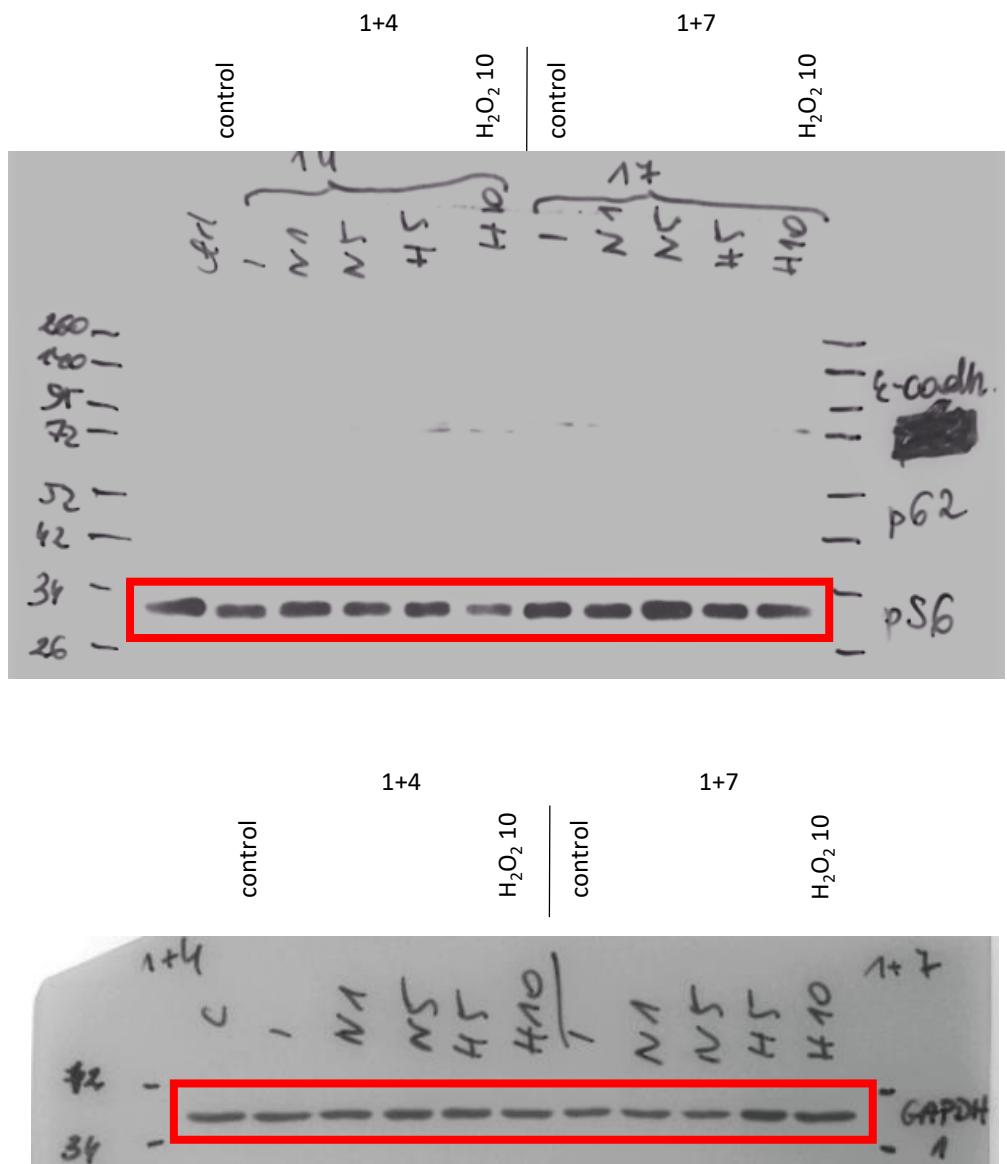


Fig. A.II.20

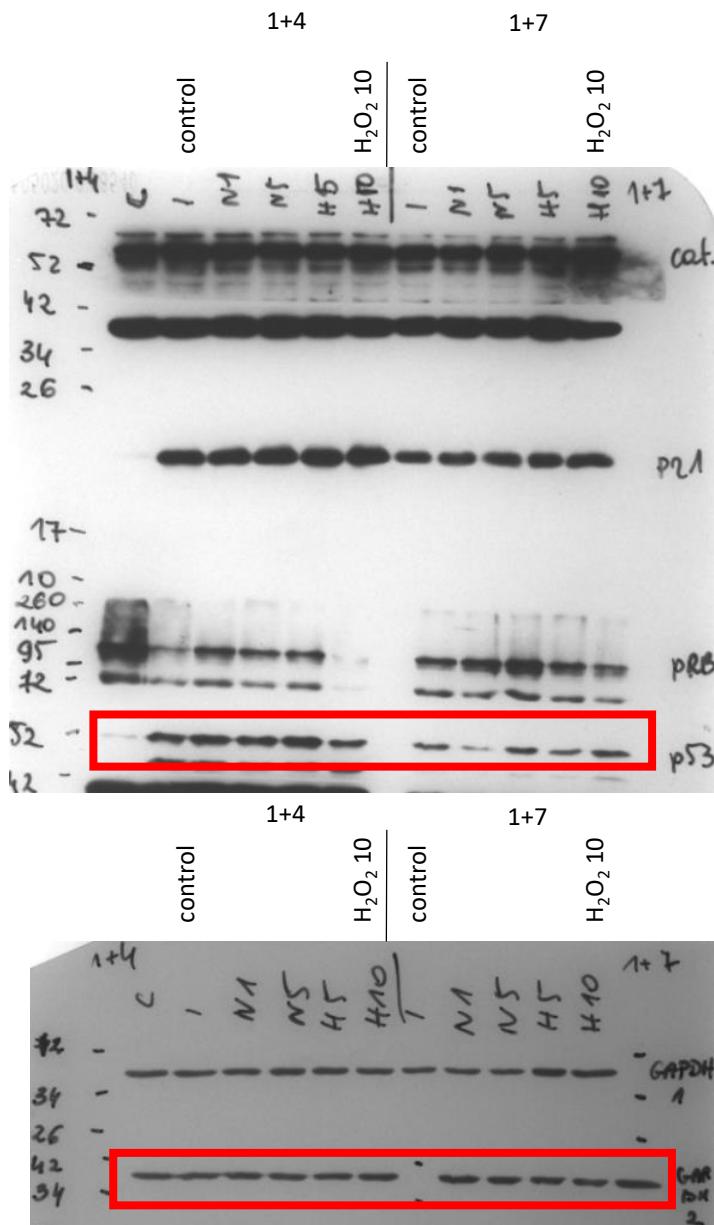


Fig. A.II.21

E-cadherin

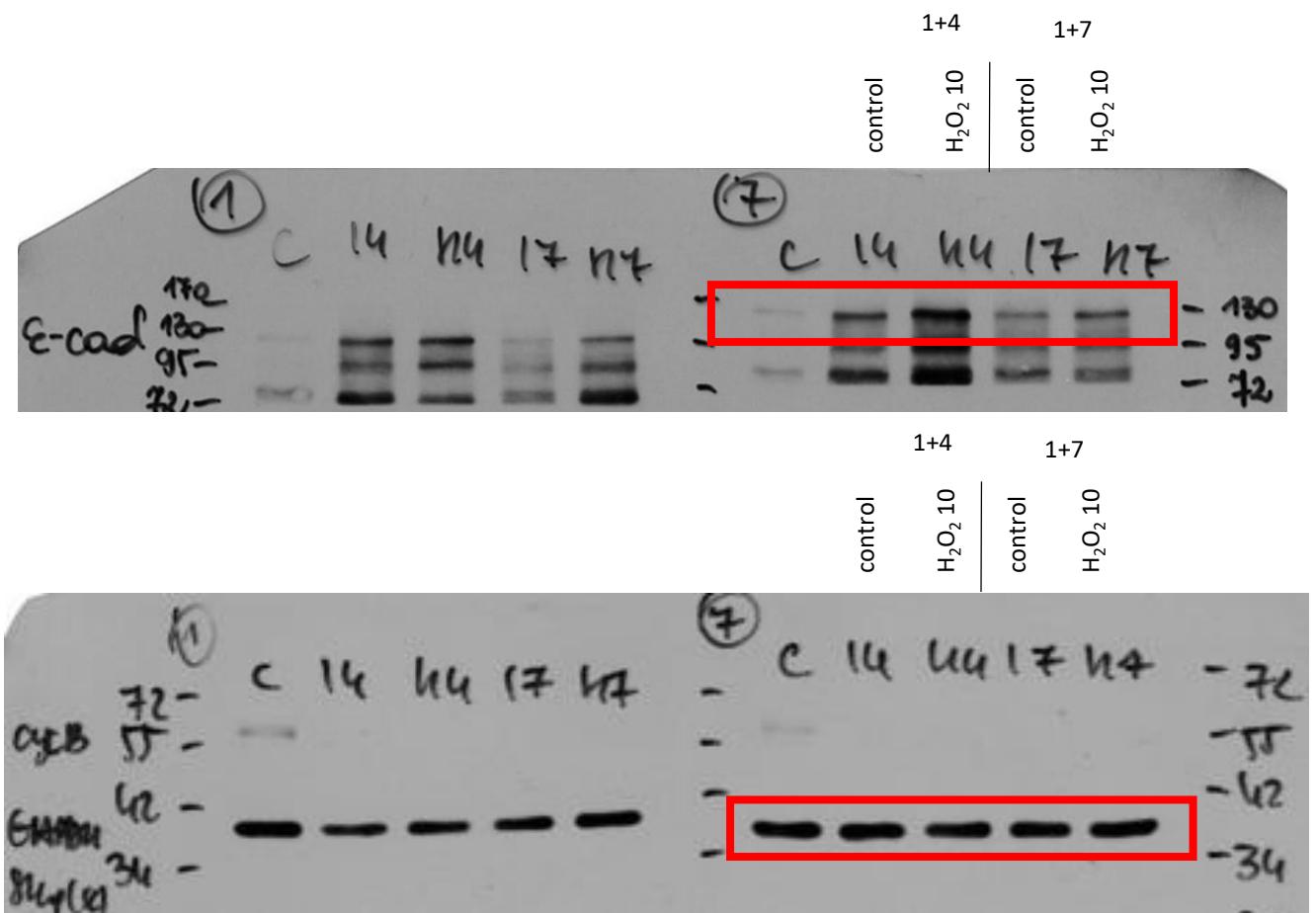


Fig. A.II.22

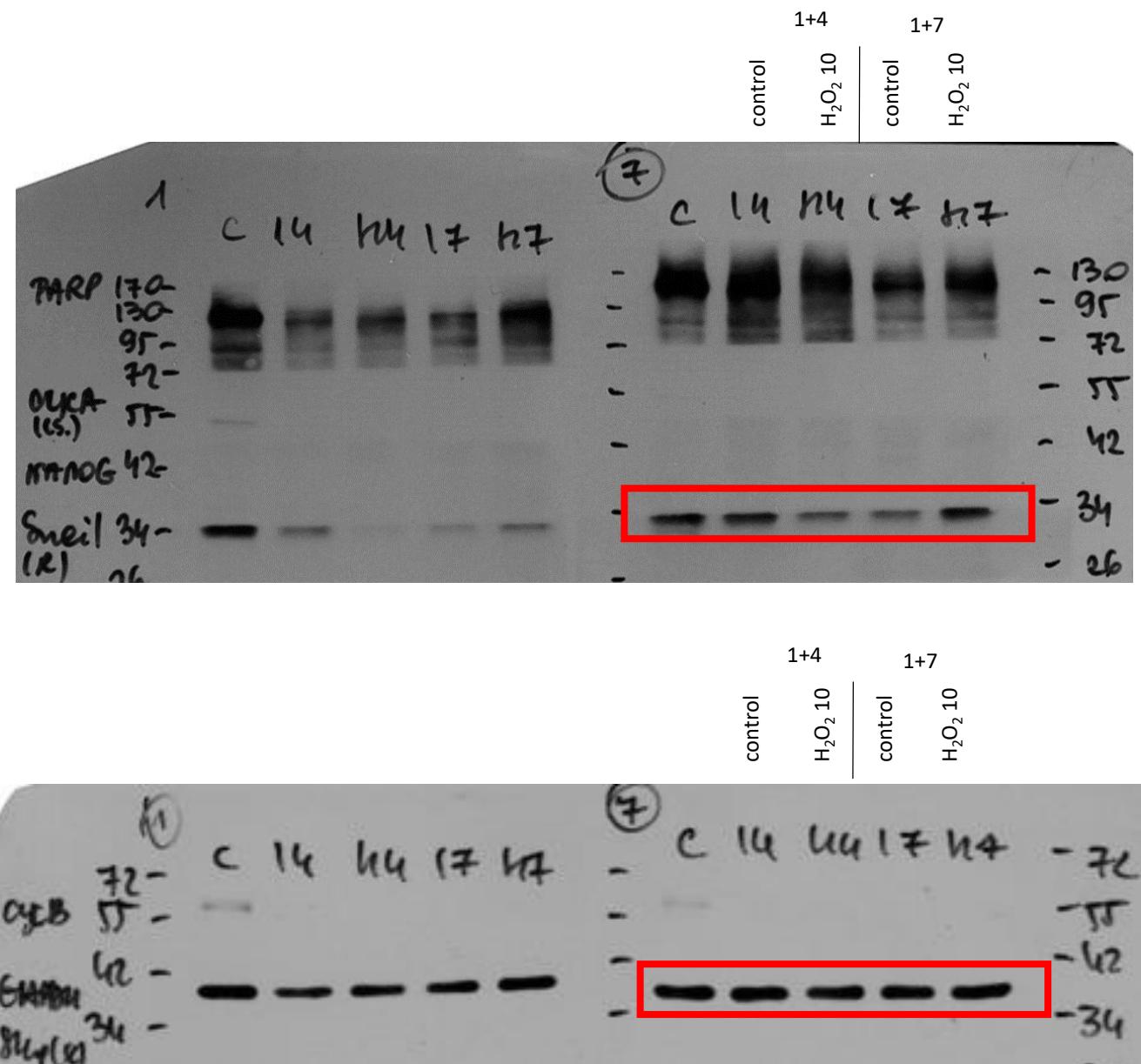


Fig. A.II.23

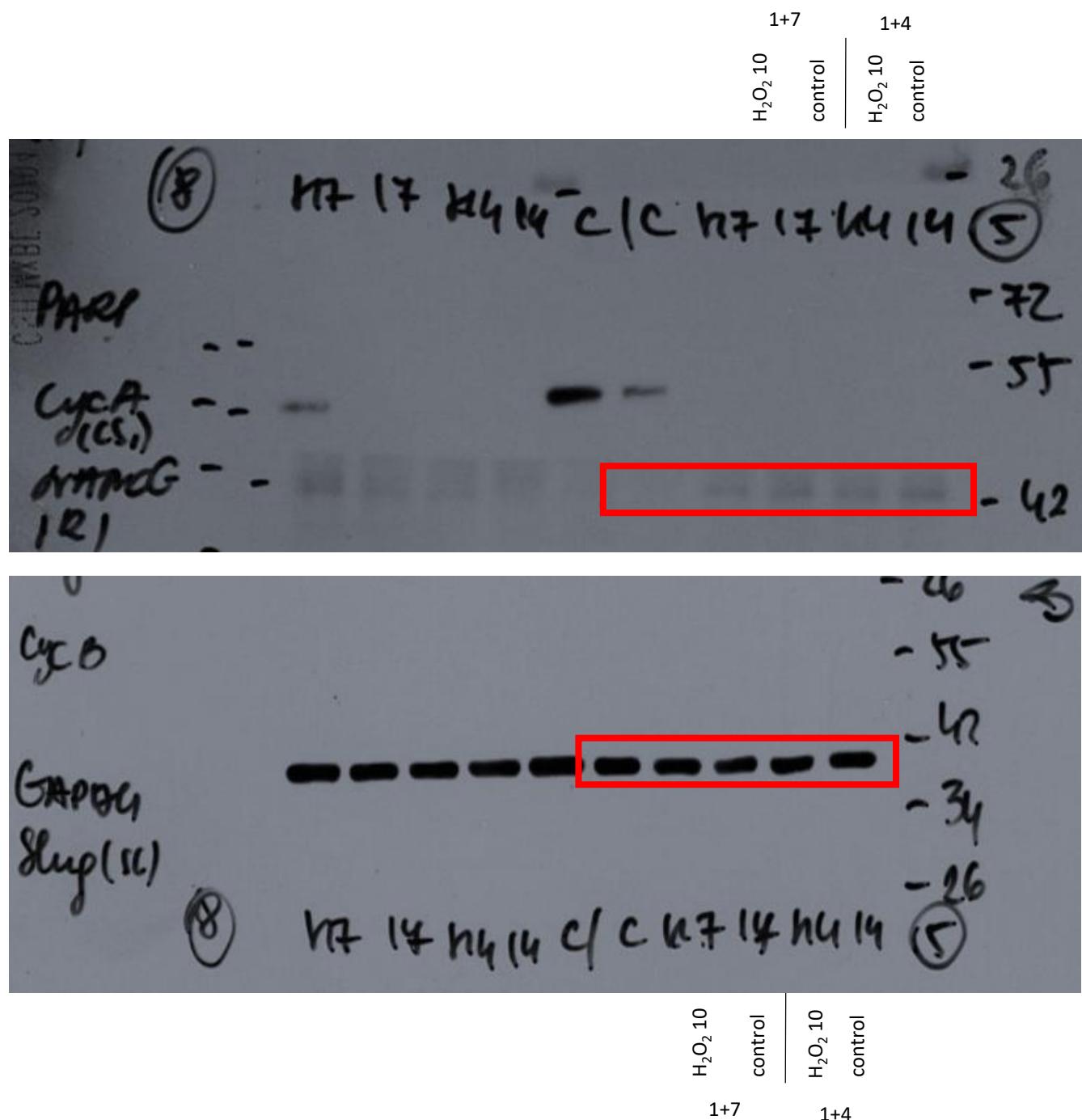


Fig. A.II.24

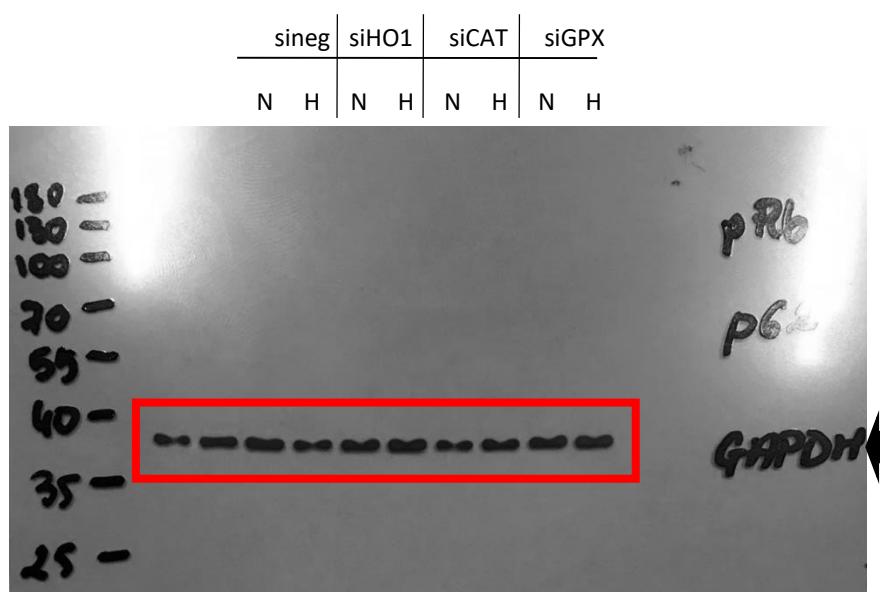
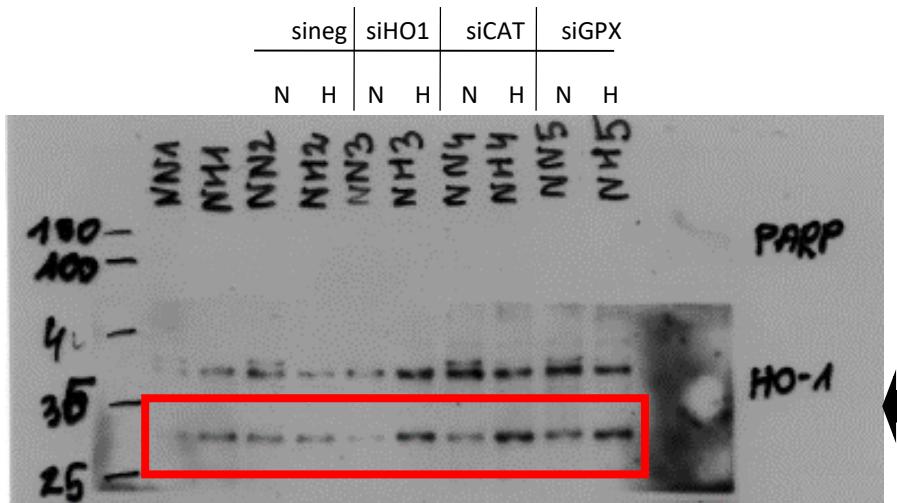


Fig. A.II.25

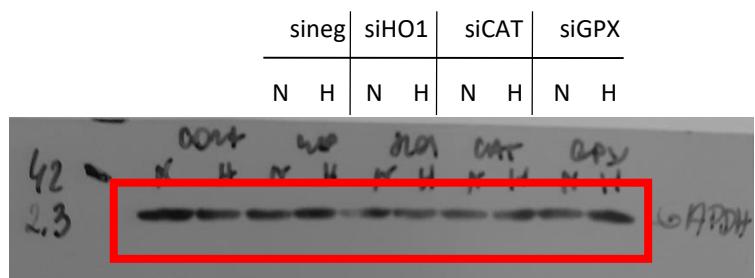
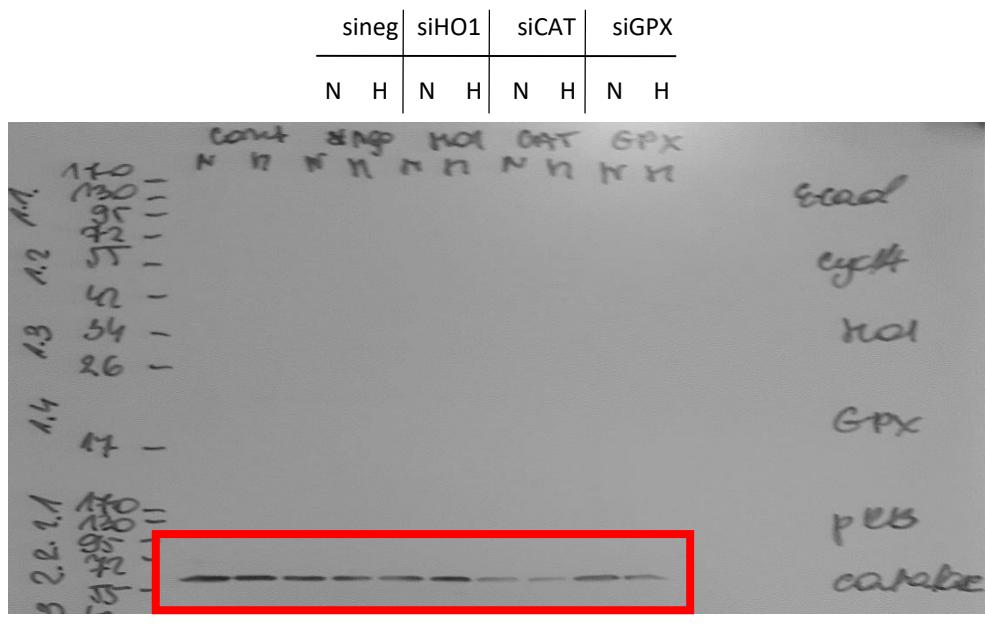


Fig. A.II.26

GPx-1

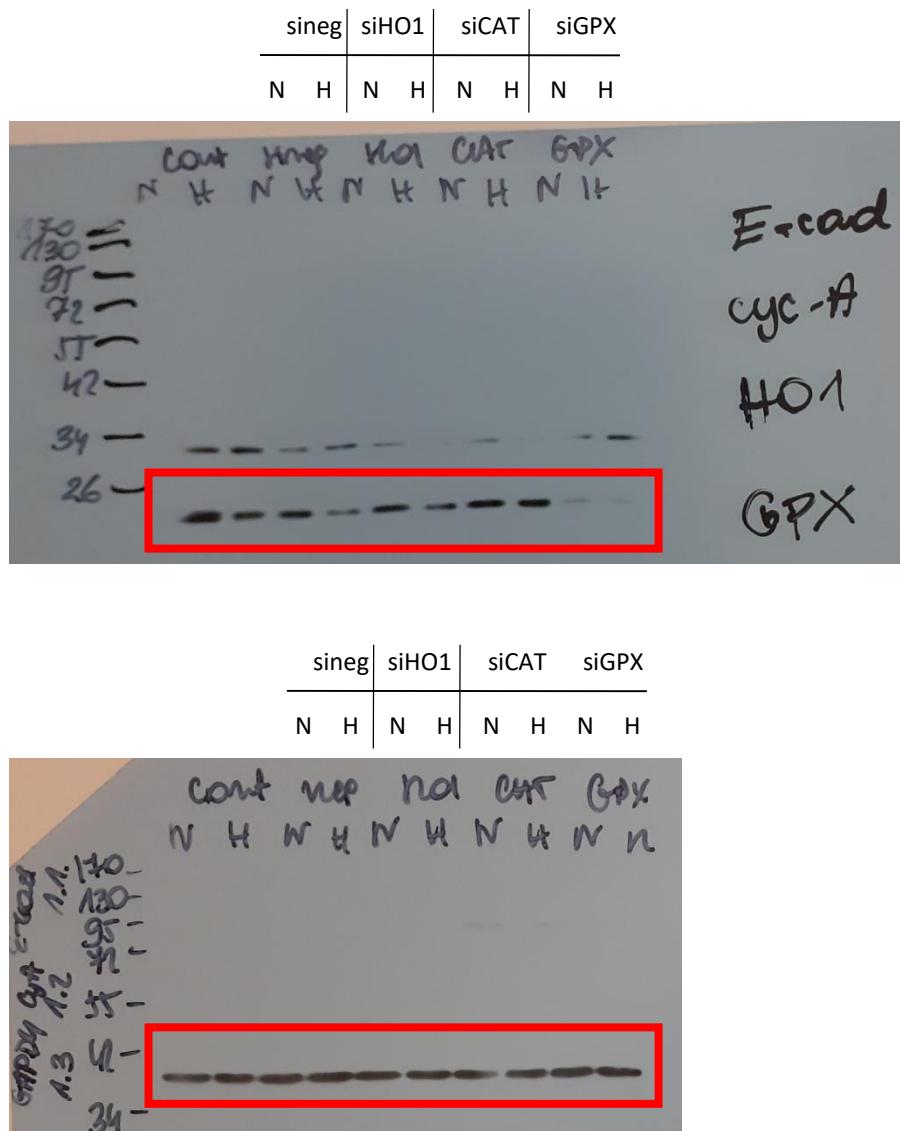


Fig. A.II.27

cyclin A

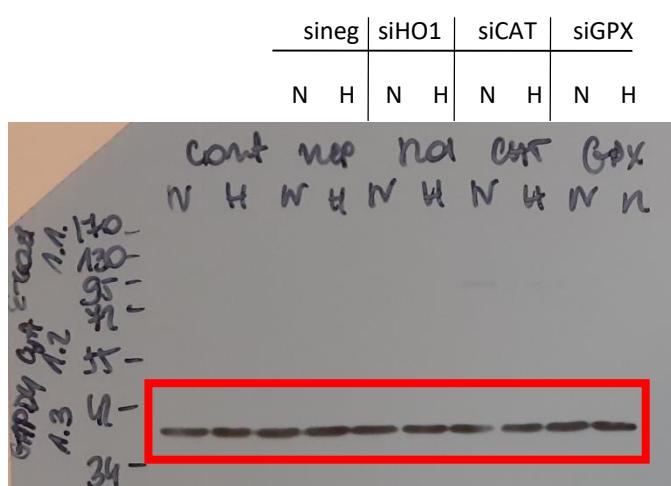
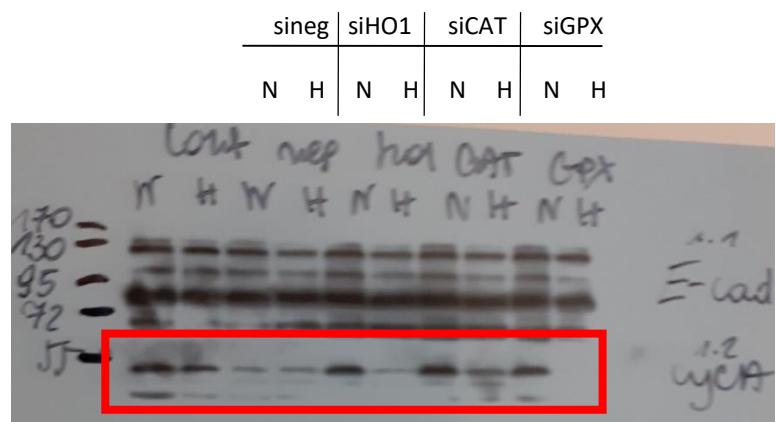


Fig. A.II.28

cyclin B

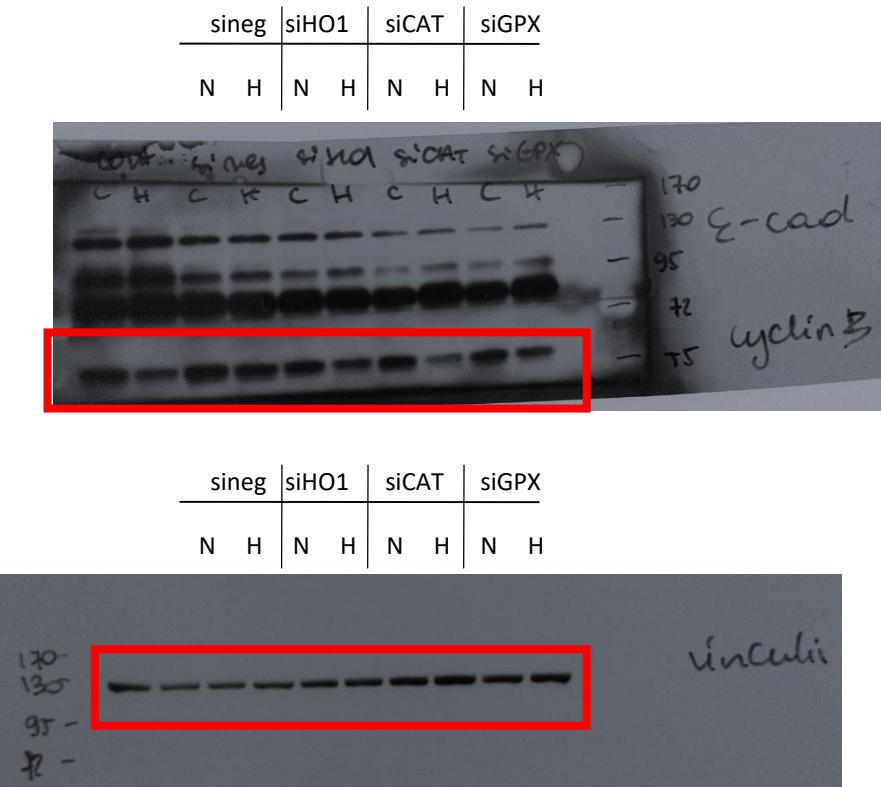


Fig. A.II.29

p-cdc2

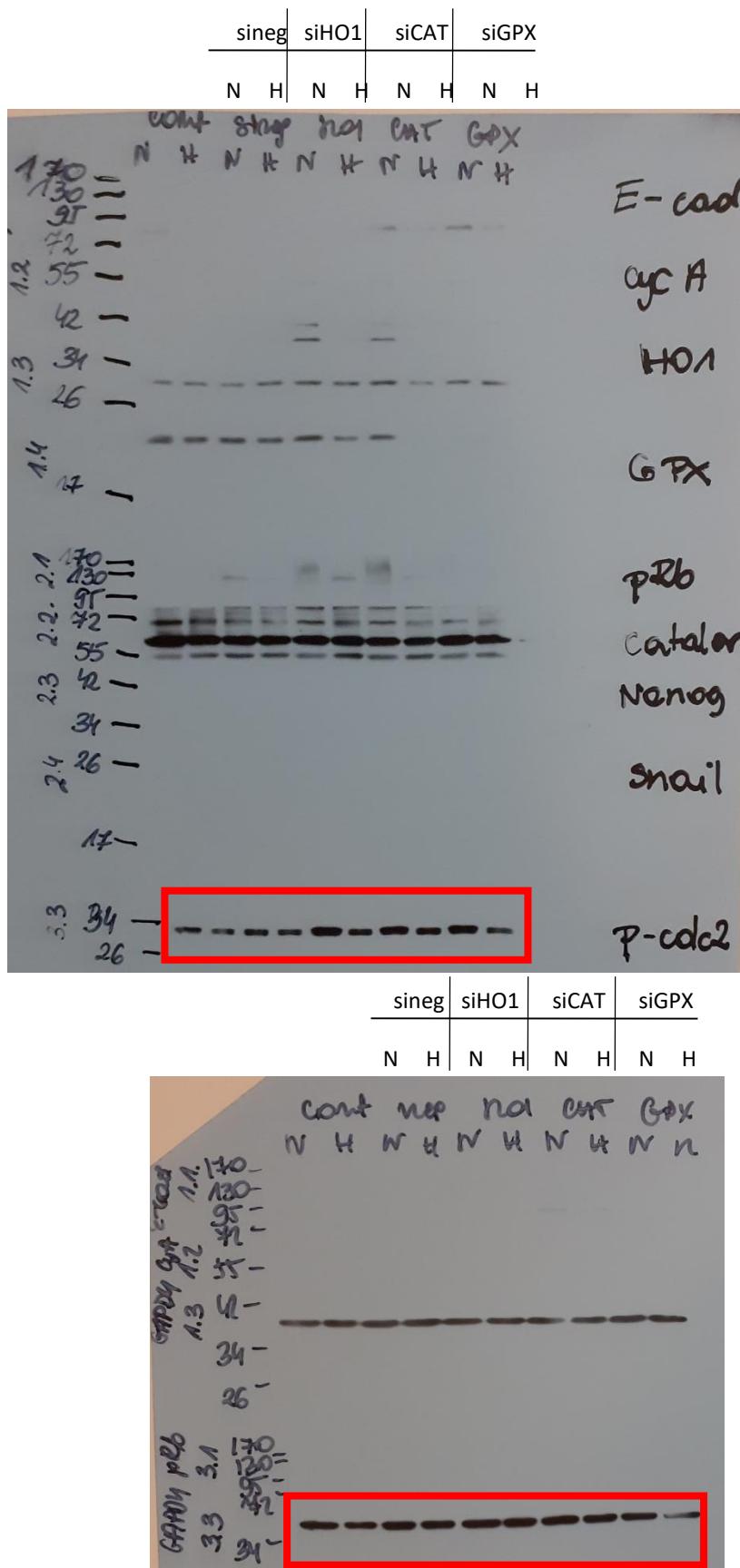
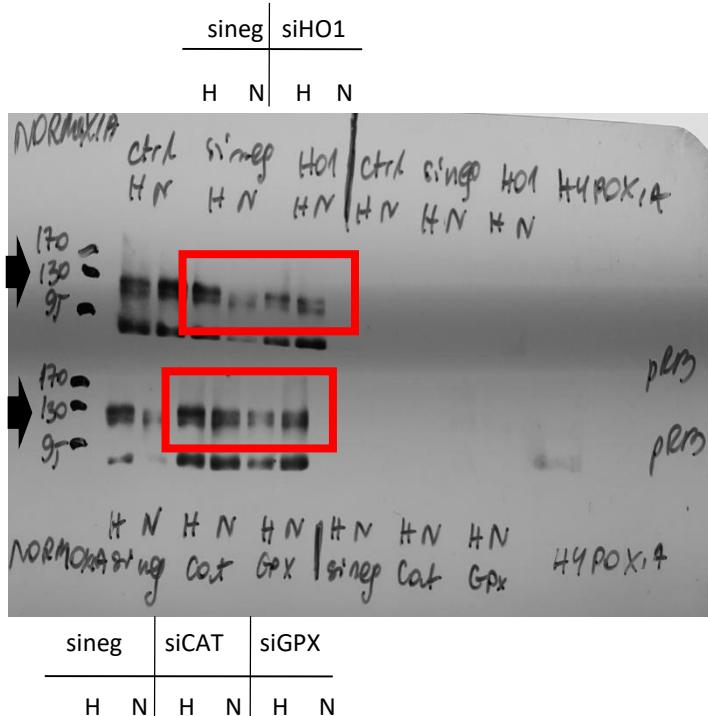


Fig. A.II.30

p-Rb



sineg	siCAT	siGPX			
H	N	H	N	H	N

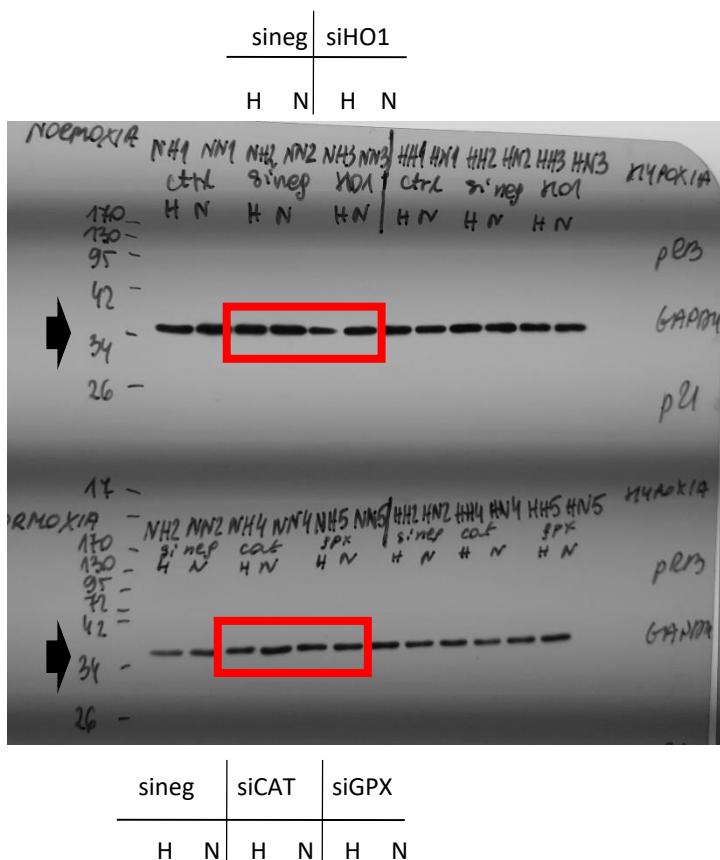


Fig. A.II.31

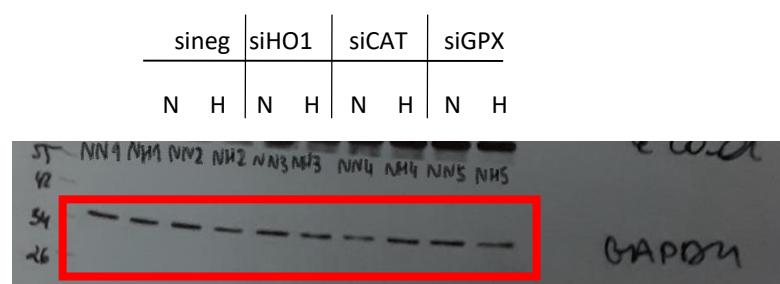
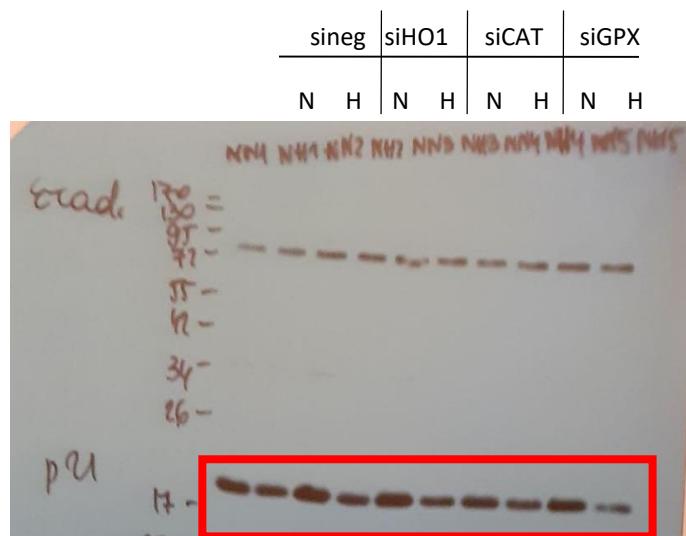


Fig. A.II.32

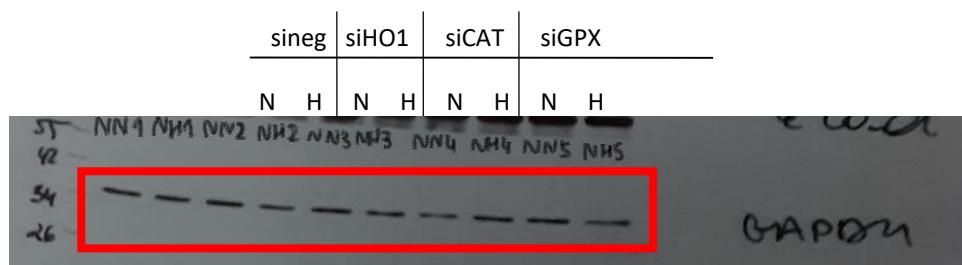
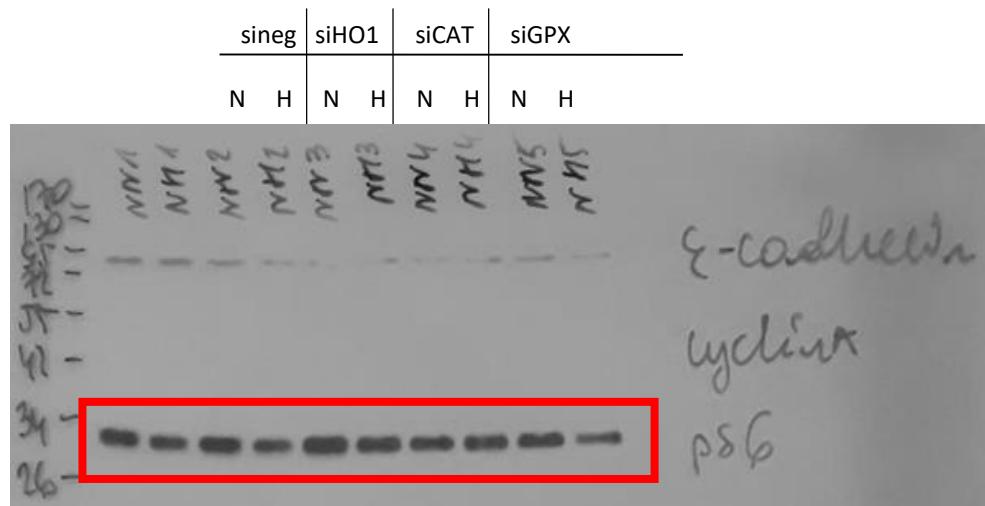


Fig. A.II.33

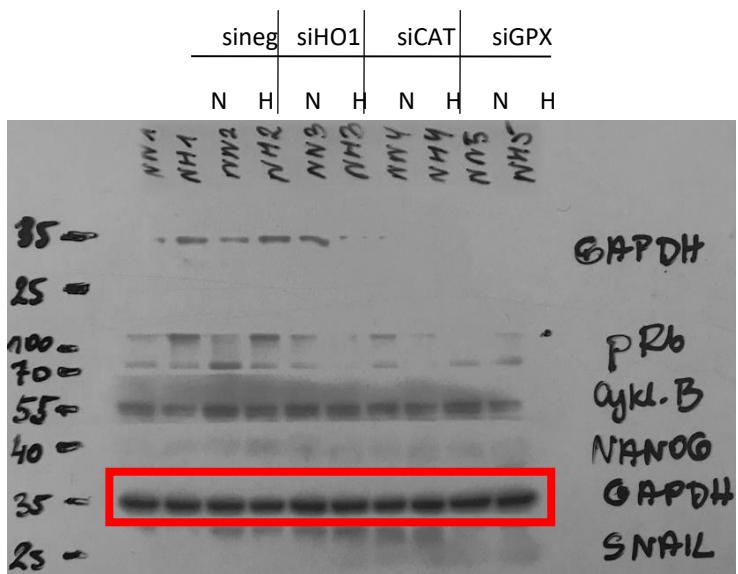
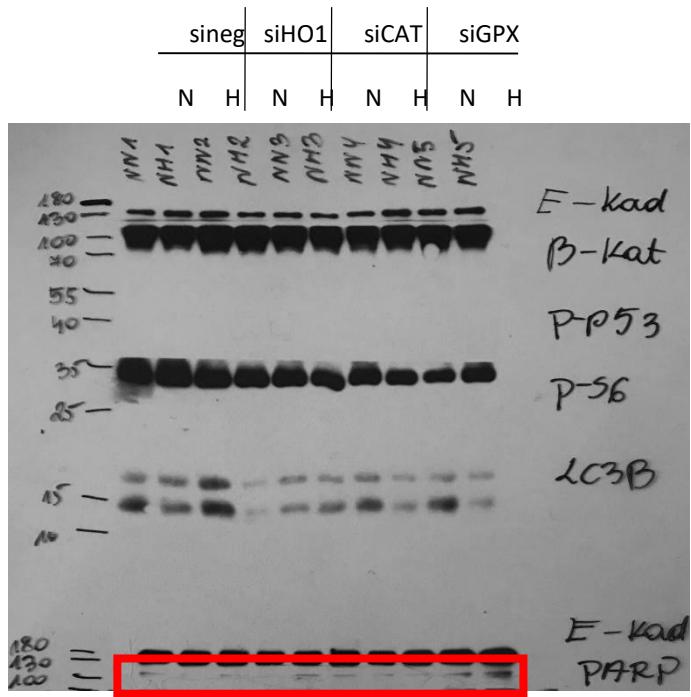


Fig. A.II.34

E-cadherin

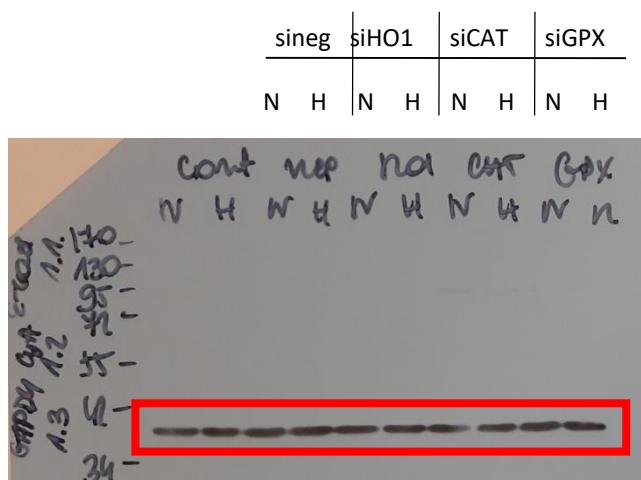
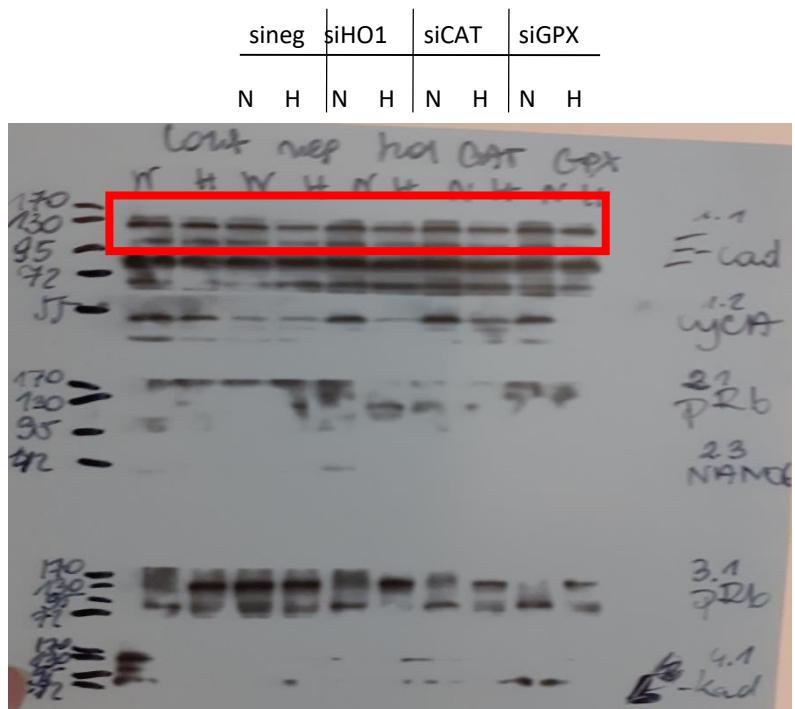


Fig. A.II.35

Snail

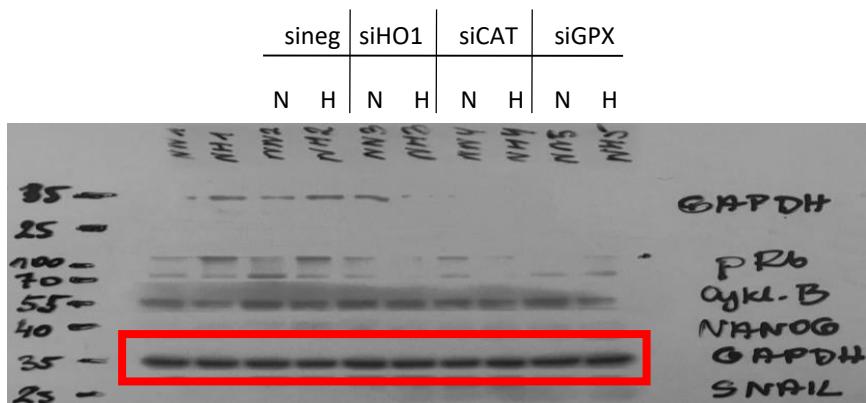
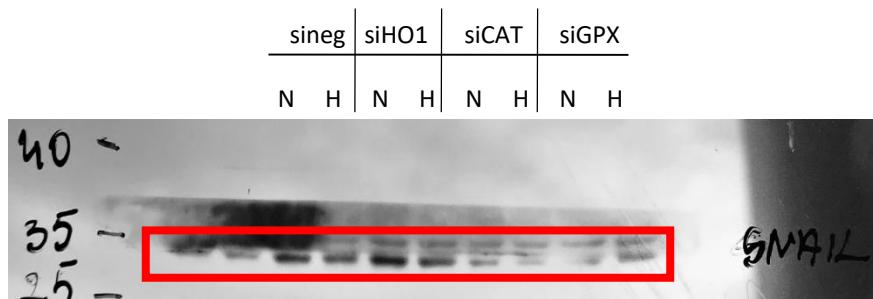


Fig. A.II.36

NANOG

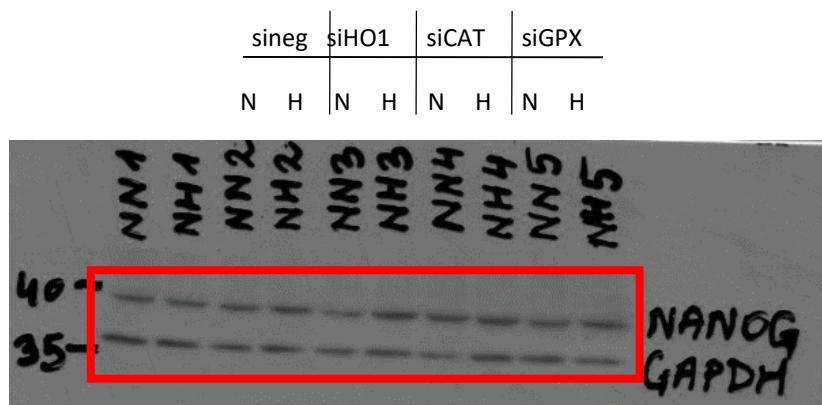


Fig. A.II.37

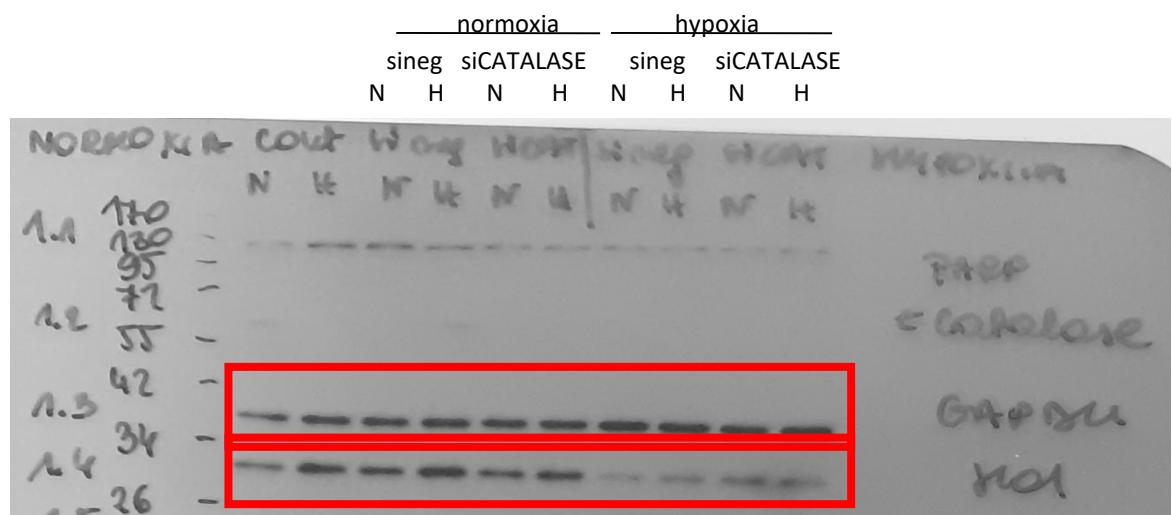


Fig. A.II.38

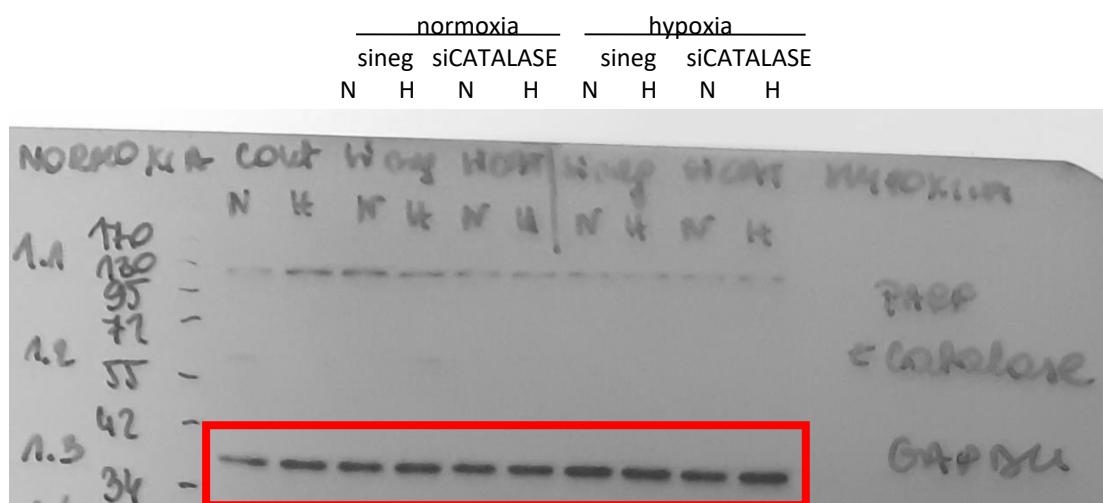
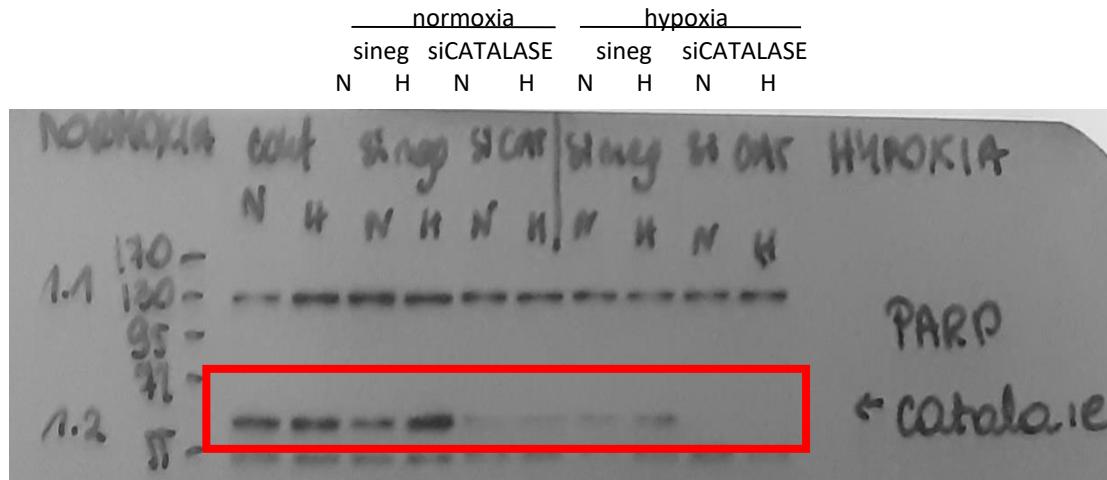


Fig. A.II.39

GPx-1

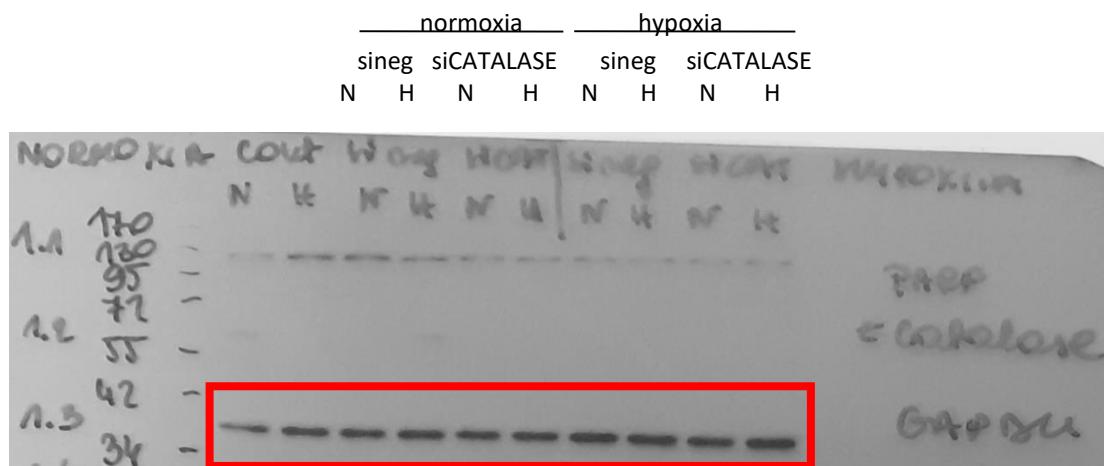
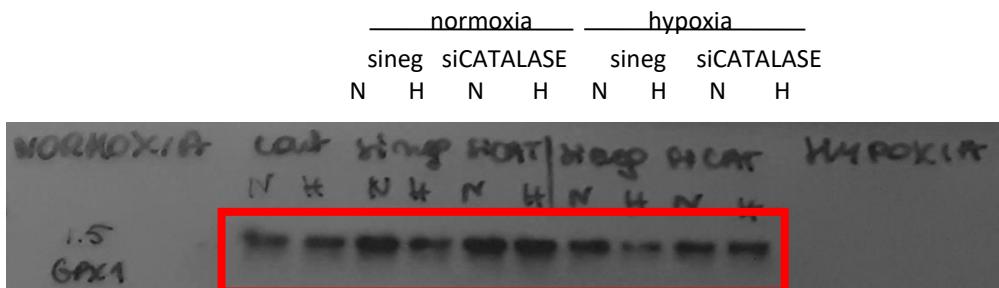


Fig. A.II.40

cyclin A

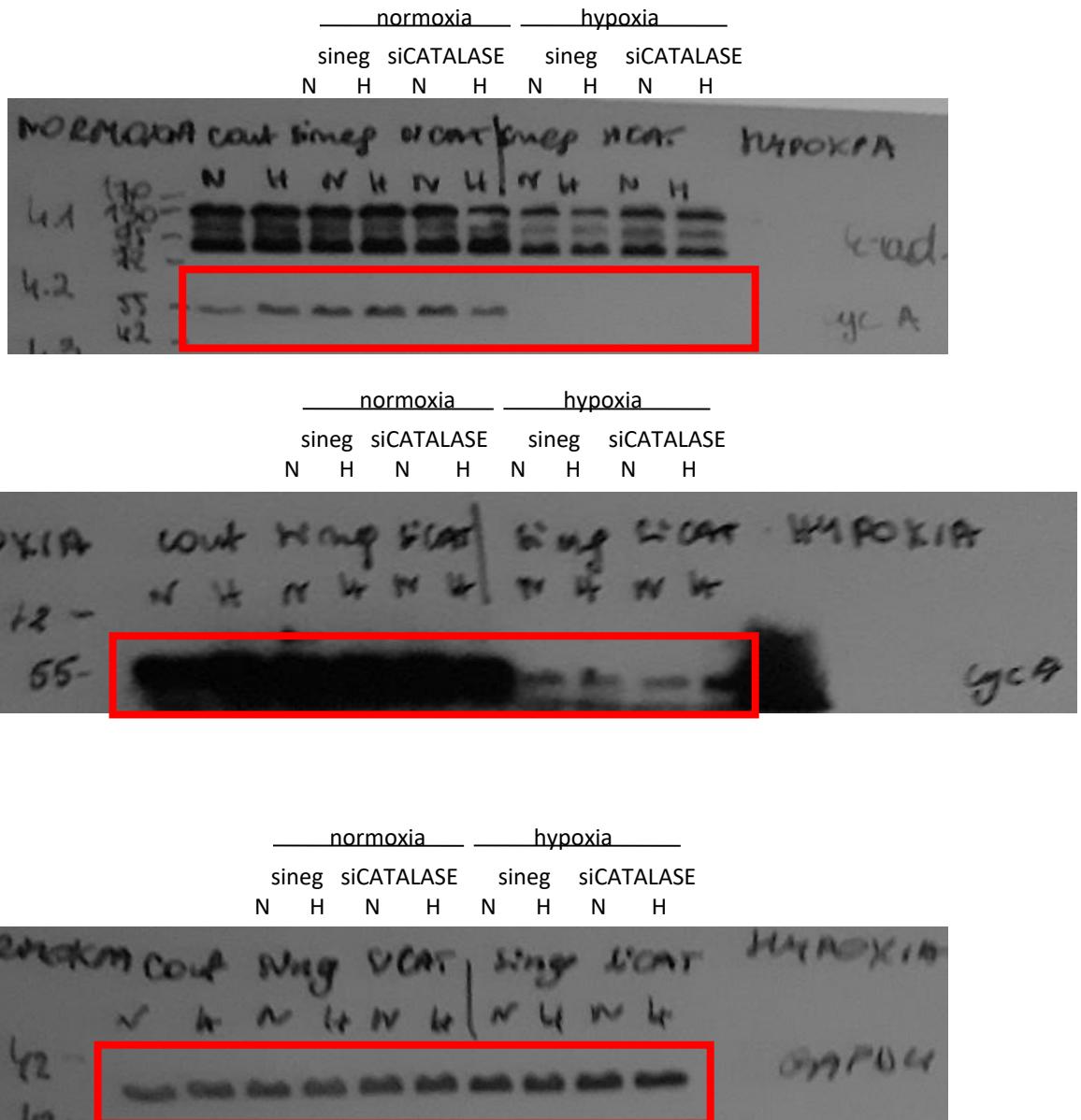


Fig. A.II.41

cyclin B

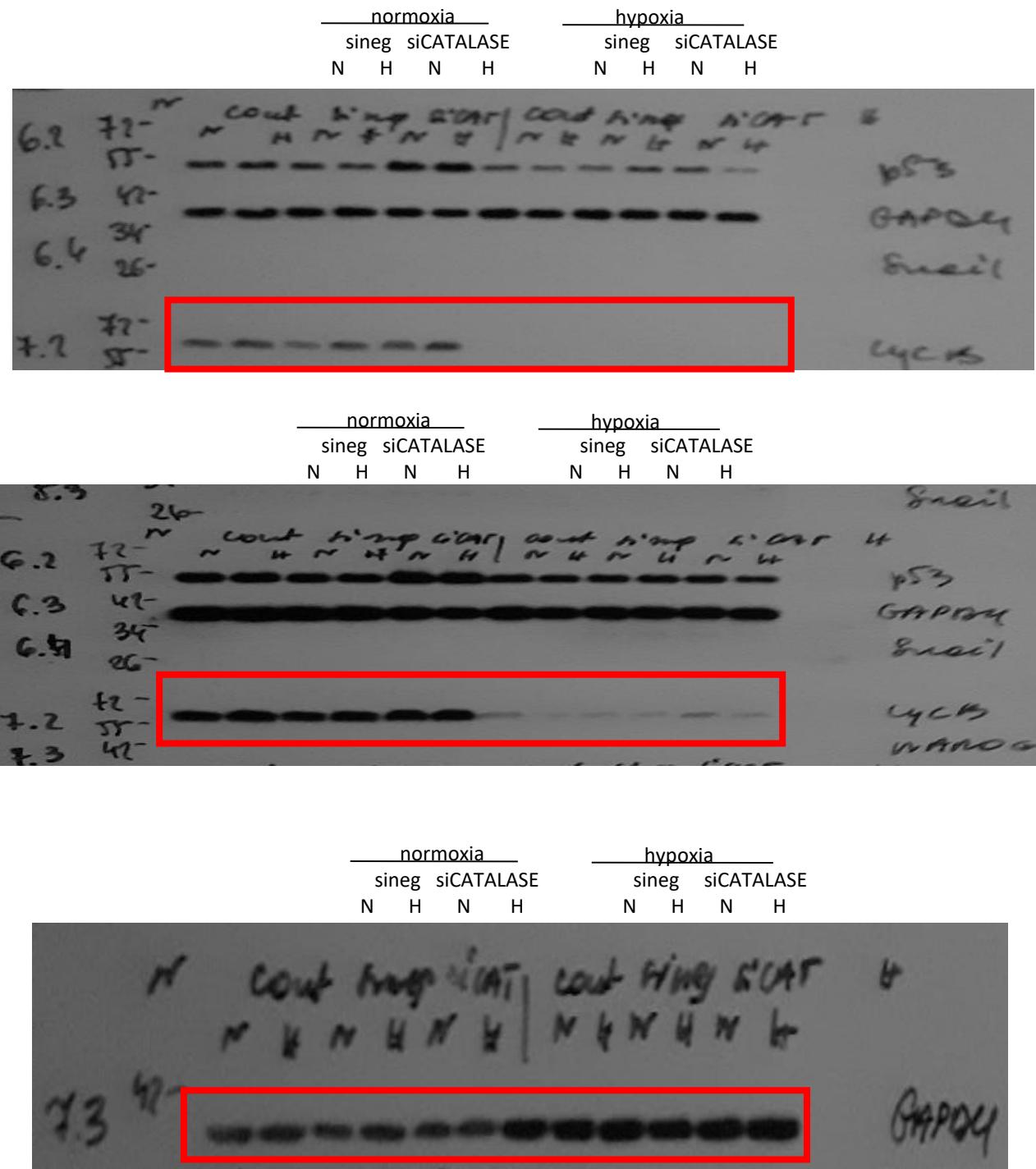


Fig. A.II.42

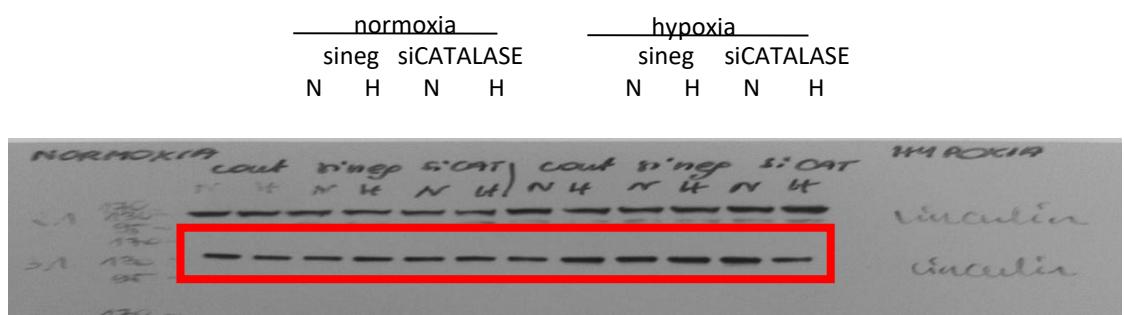
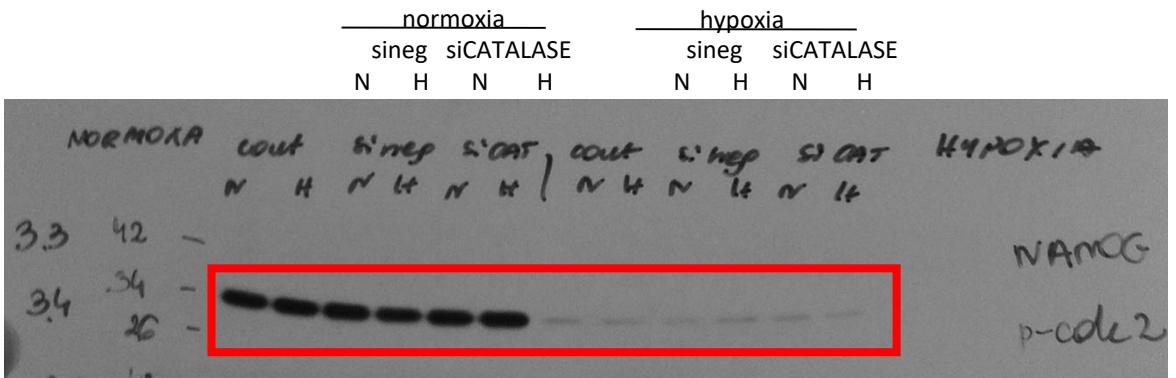


Fig. A.II.43

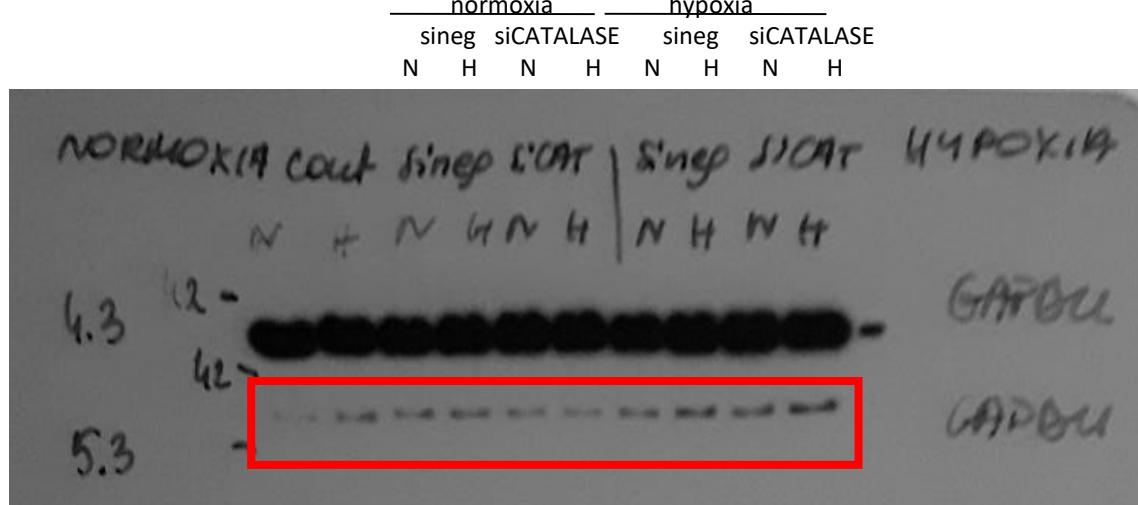
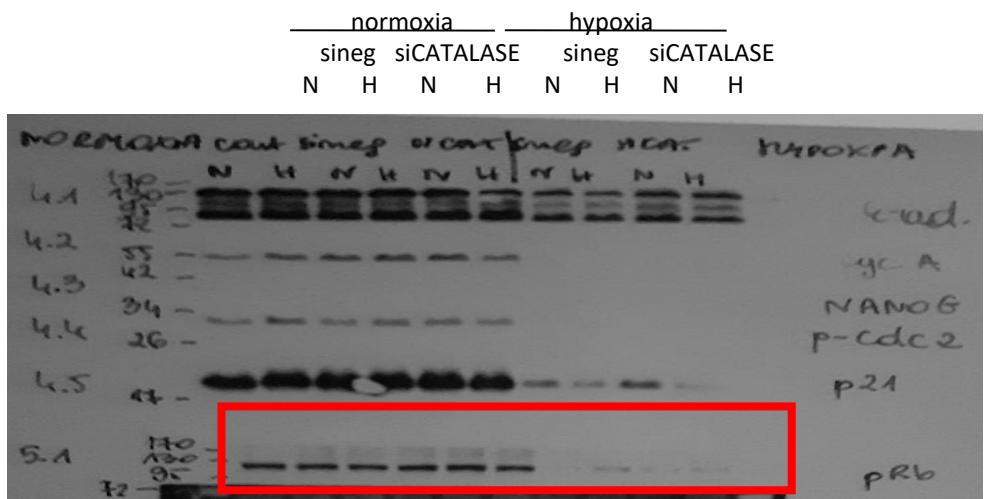


Fig. A.II.44

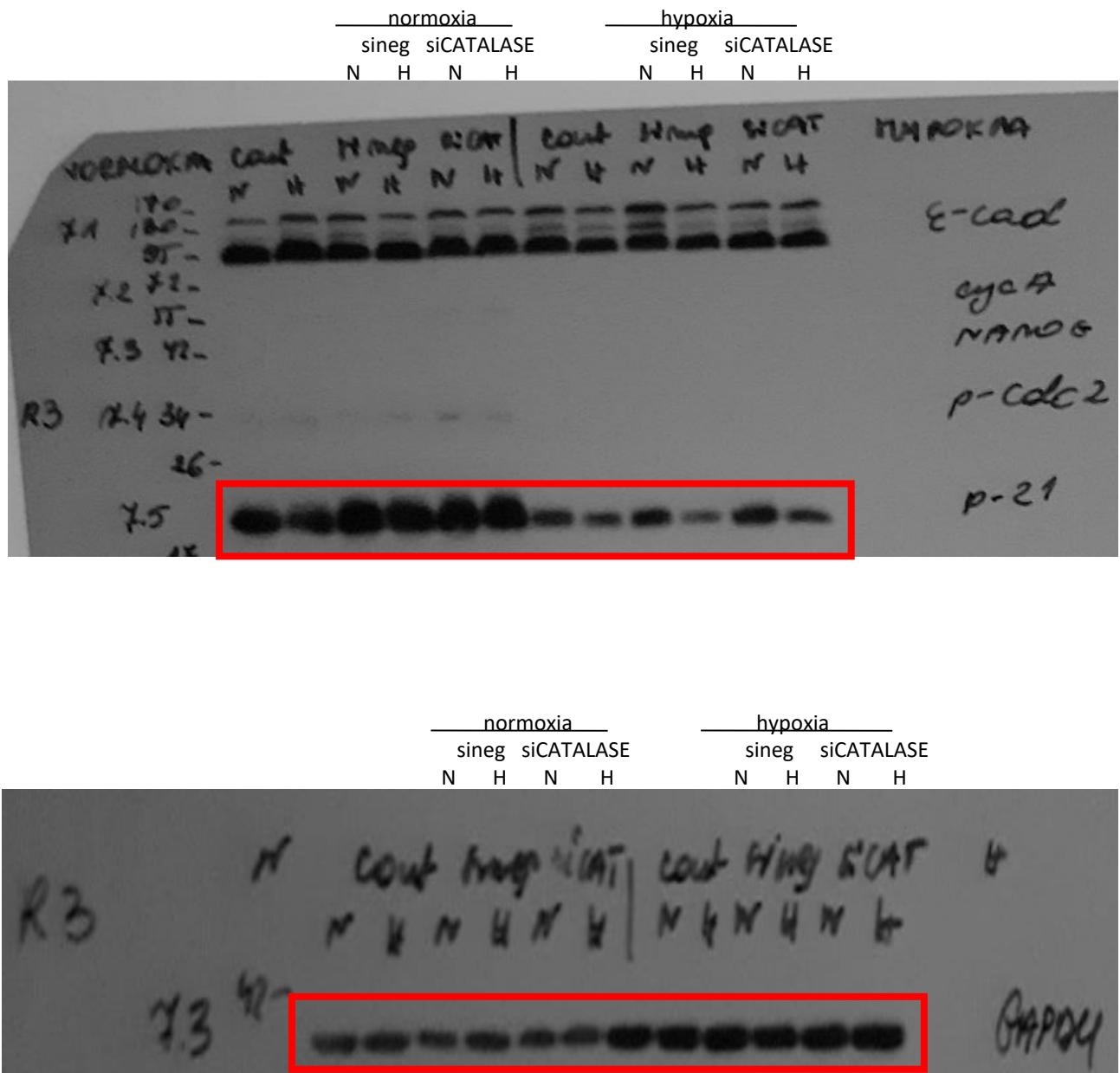


Fig. A.II.45

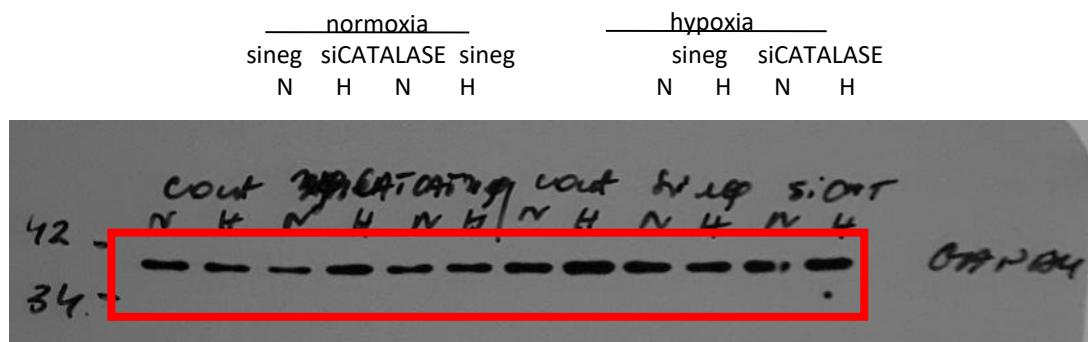
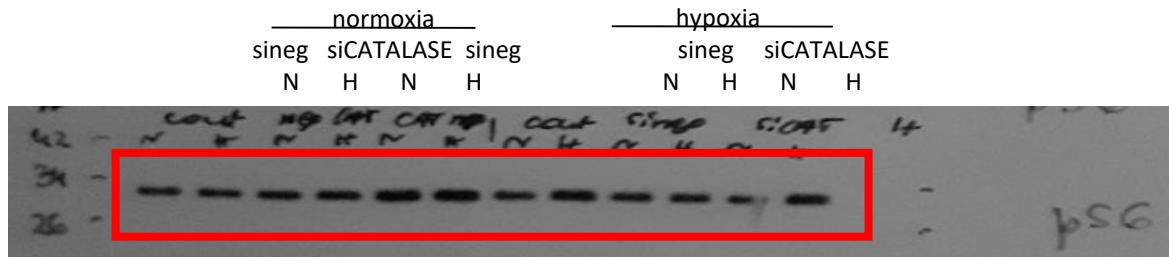


Fig. A.II.46

PARP-1

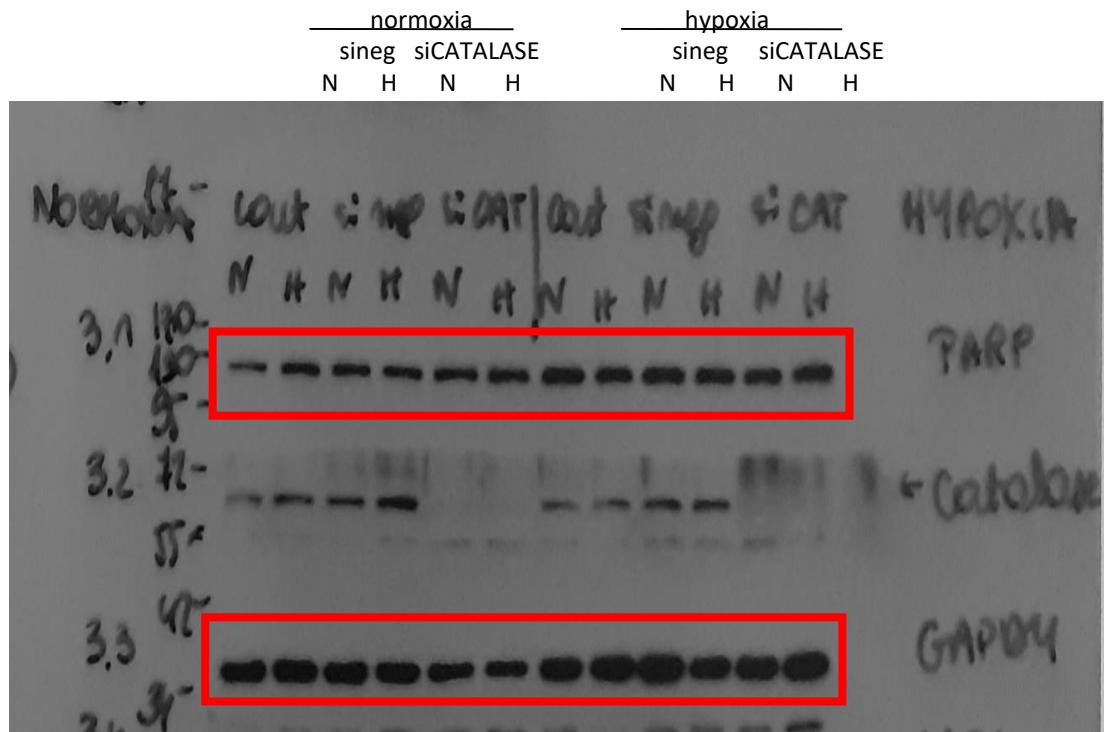


Fig. A.II.47

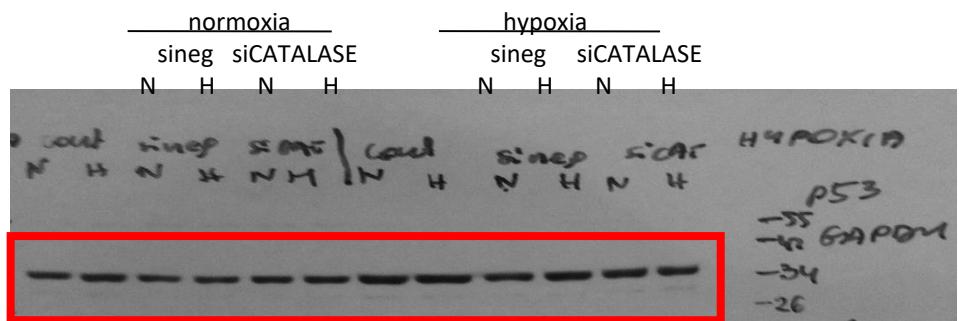
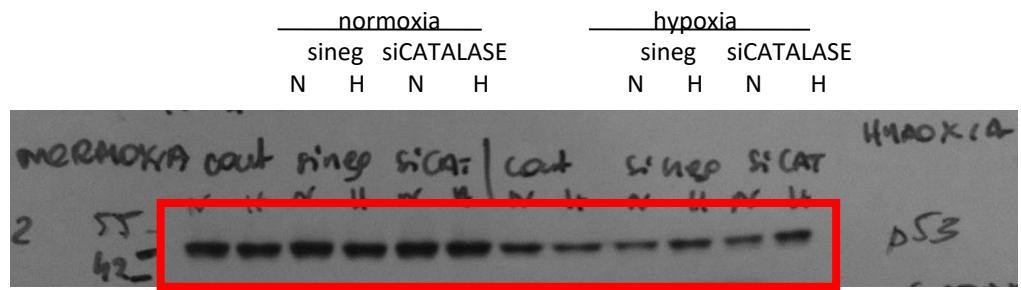


Fig. A.II.48

E-cadherin

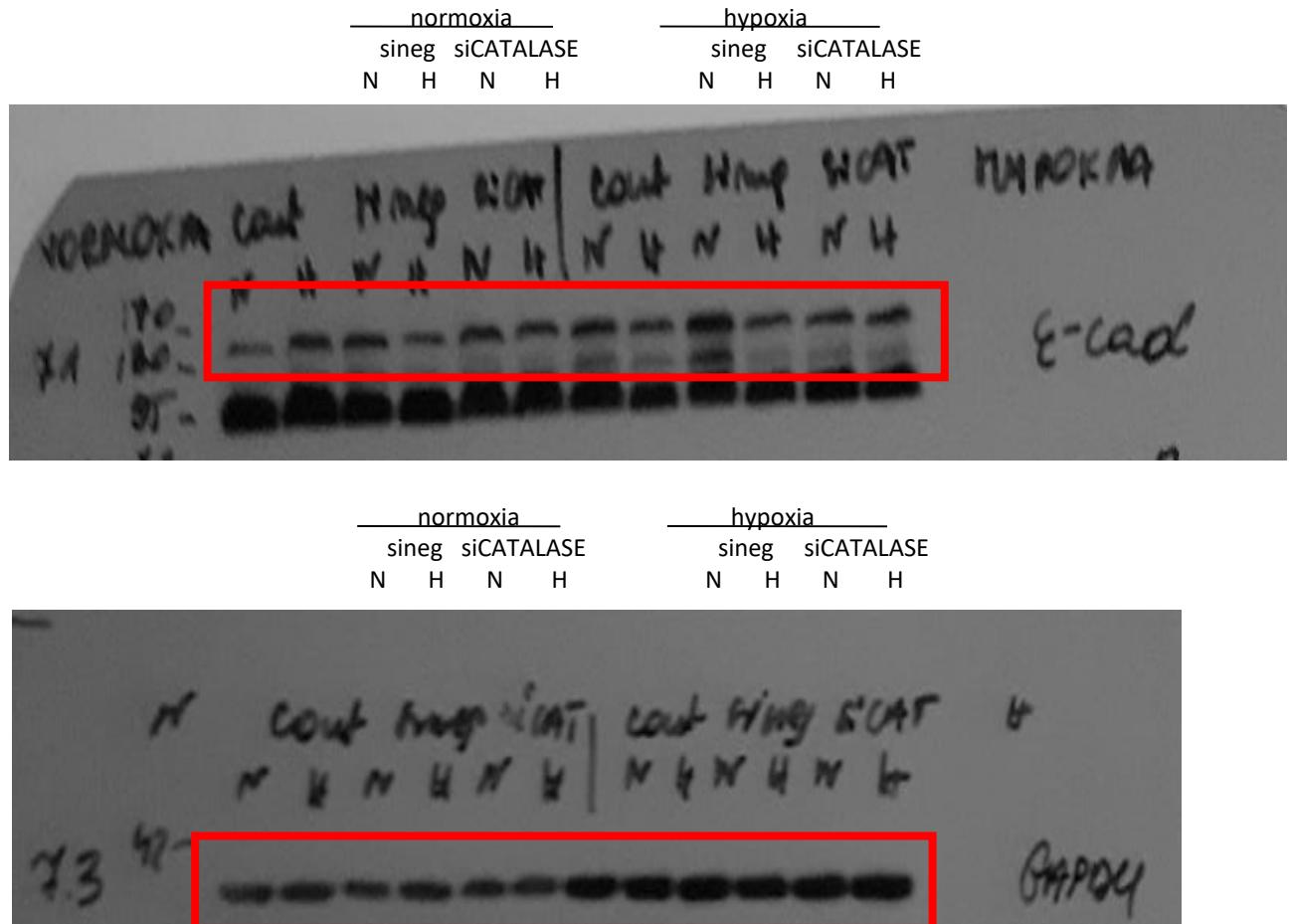


Fig. A.II.49

Snail

Snail

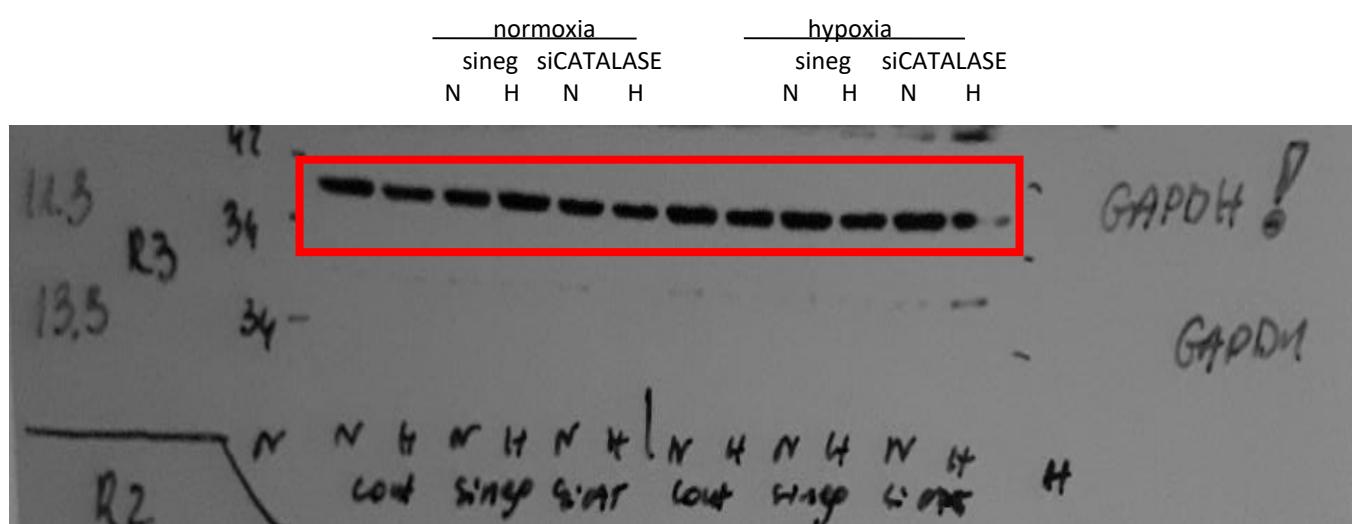
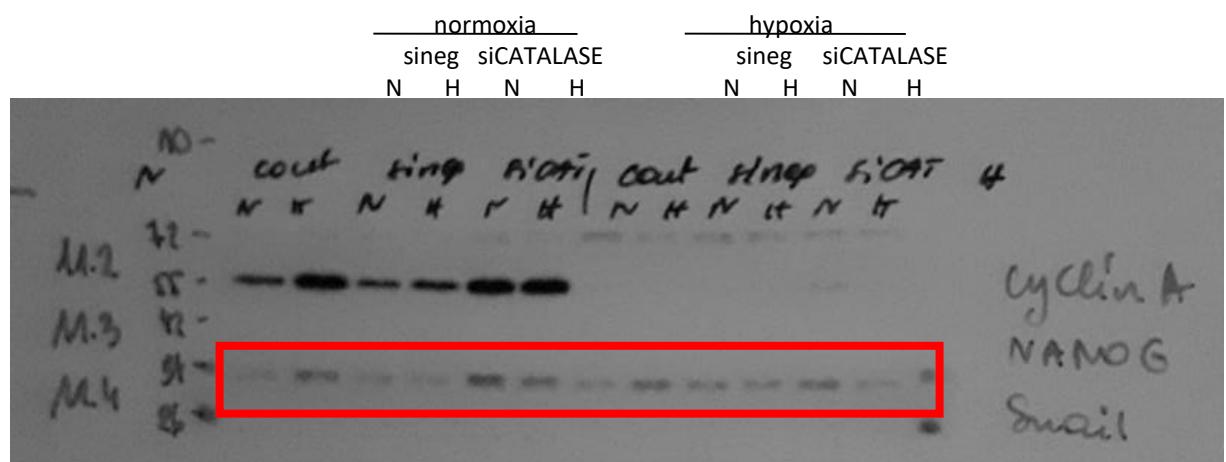


Fig. A.II.50

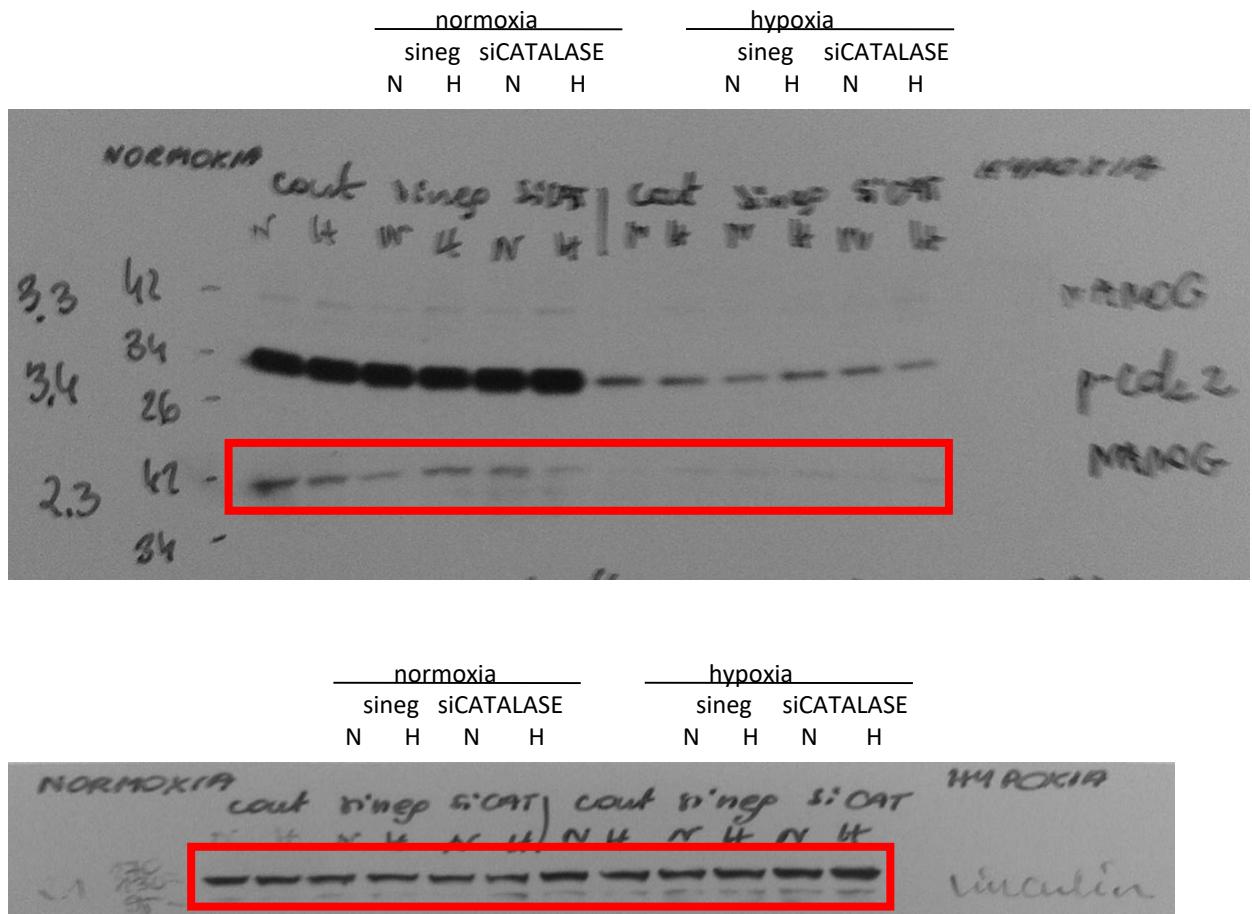


Fig. A.II.51