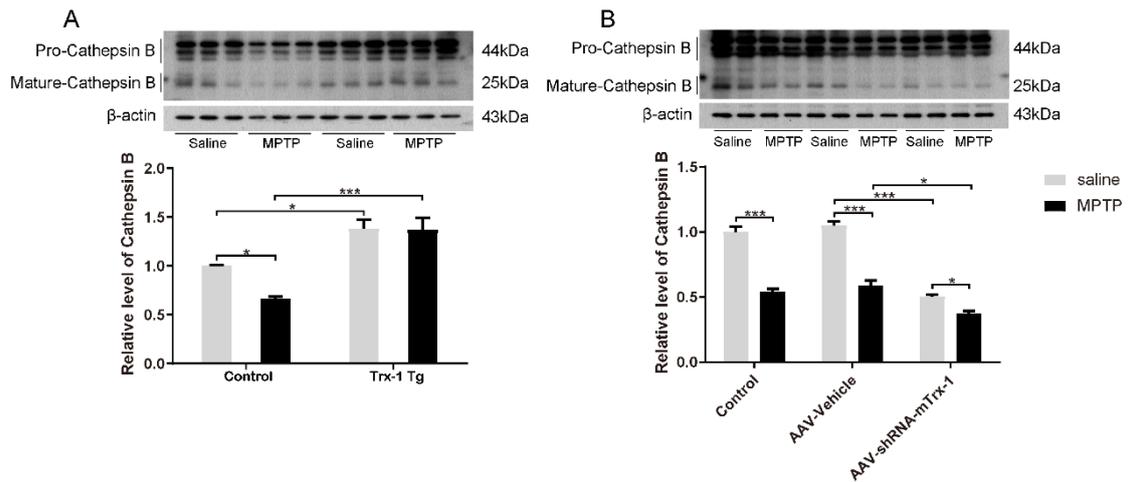


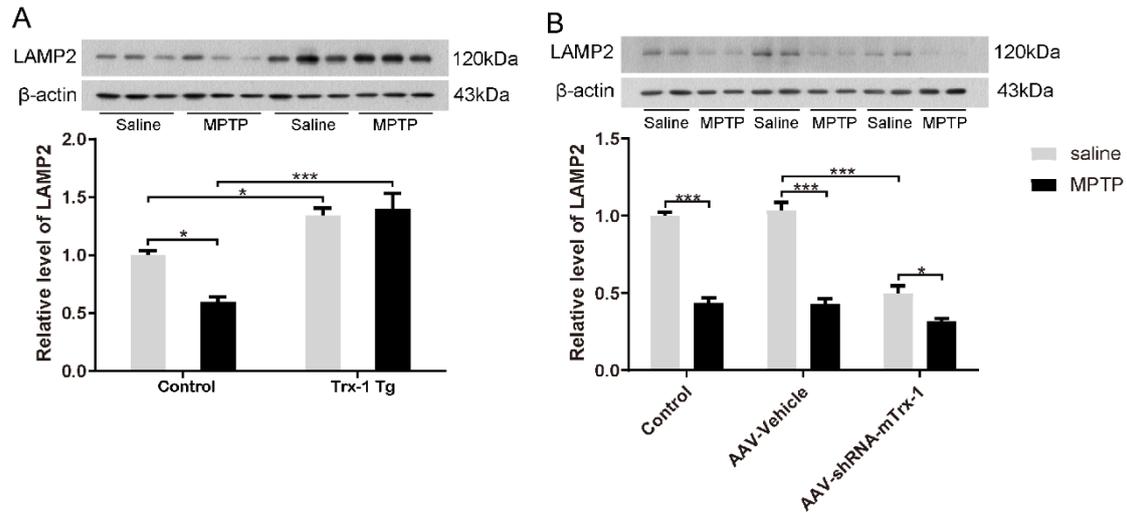
**Supplementary Figure 1. Effect of Trx-1 on  $\alpha$ -syn mRNA level in the SNpc in MPTP-treated mice.**

The mRNA level of  $\alpha$ -syn was increased MPTP, which was suppressed by Trx-loverexpressing (**A**), and further increased by Trx-1 knockdown (**B**). Each bar represents the mean  $\pm$  SEM (n = 6). \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ , statistically significant.



**Supplementary Figure 2. Effect of Trx-1 on expression of cathepsin B in the SNpc in MPTP-treated mice.**

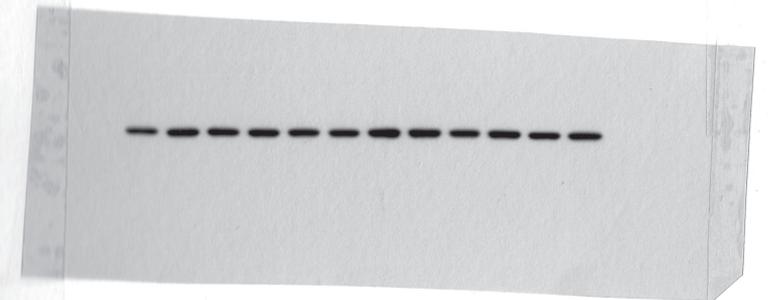
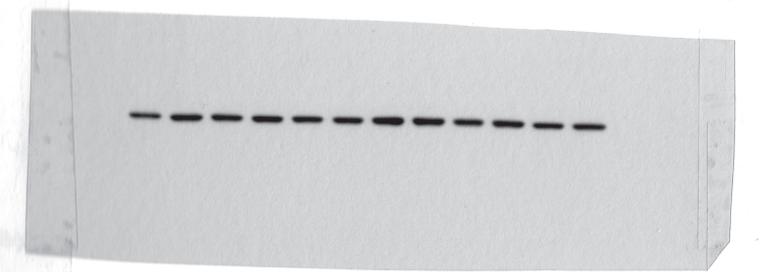
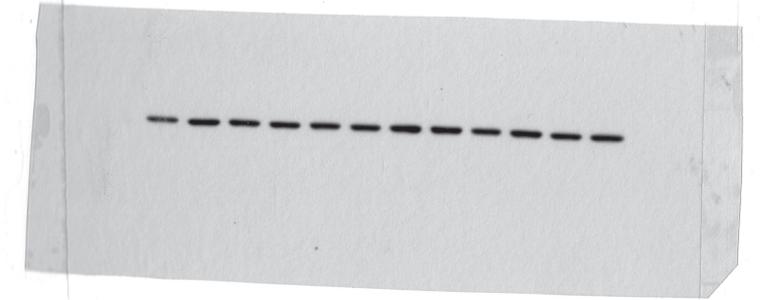
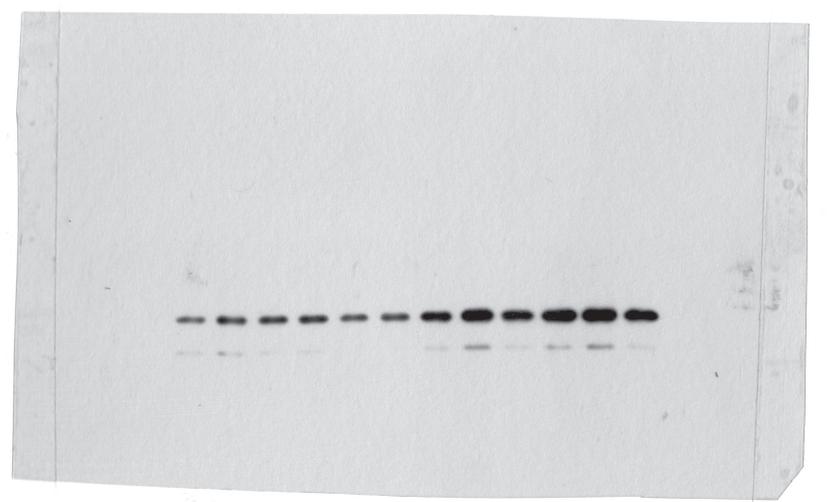
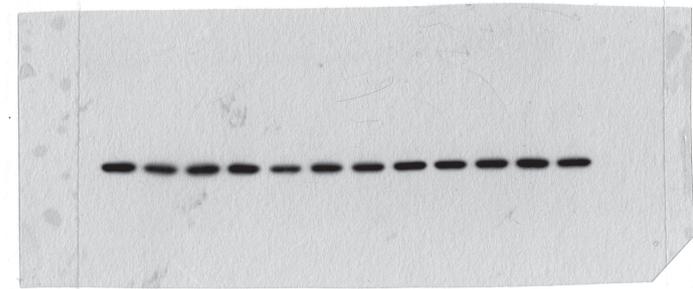
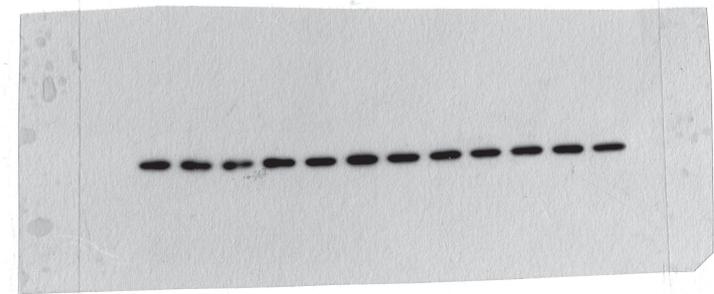
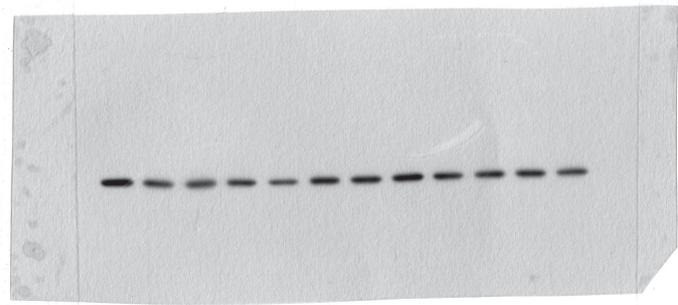
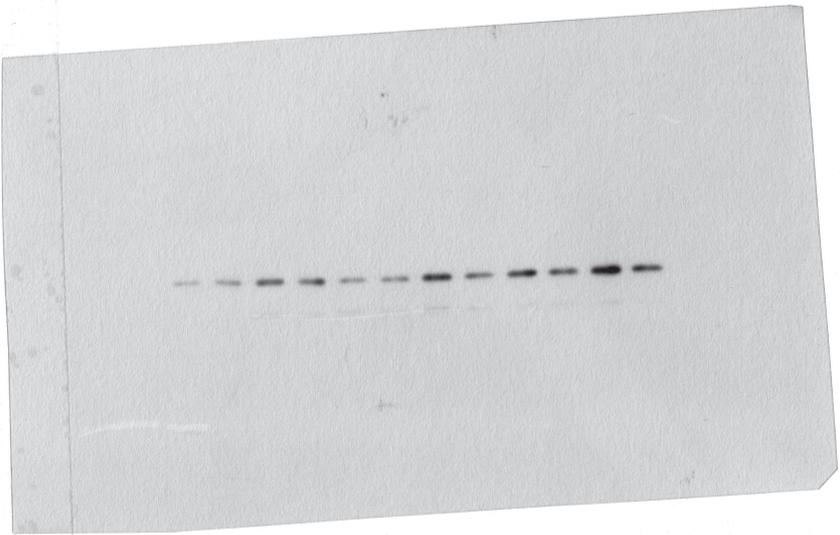
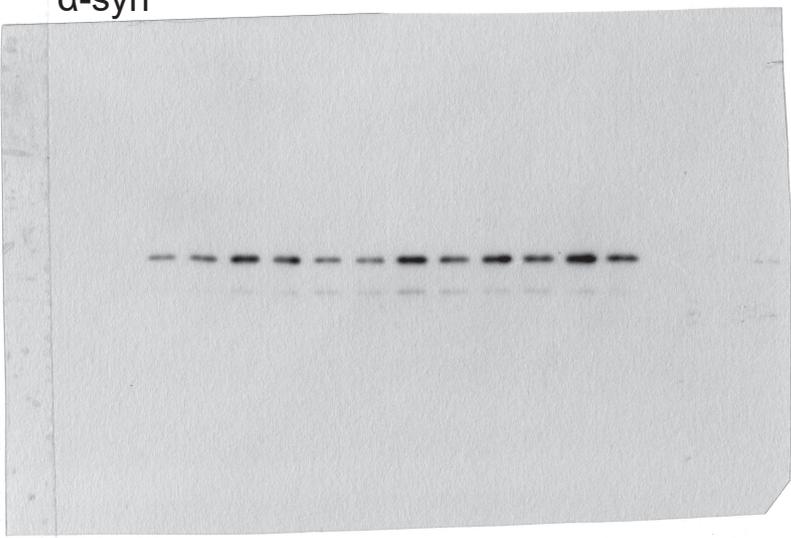
The expression of cathepsin B in the SNpc was detected by Western blot analysis after administration with MPTP. The expression of cathepsin B was decreased by MPTP, which was restored in Trx-1 overexpressing transgenic (Tg) mice (A) and was further decreased in Trx-1 knockdown in the SNpc in mice (B). Each bar represents the mean  $\pm$  SEM (n = 6). \*  $P < 0.05$ , \*\*\*  $P < 0.001$ , statistically significant.



**Supplementary Figure 3. Effects of Trx-1 on expression of LAMP2 in the SNpc in MPTP-treated mice.**

The expression of LAMP2 in the SNpc was detected by Western blot analysis. The expression of LAMP2 was decreased by MPTP, which was restored in Trx-1 overexpressing transgenic (Tg) mice (A) and was further decreased in Trx-1 knockdown in the SNpc in mice (B). Each bar represents the mean  $\pm$  SEM (n = 6). \*  $P < 0.05$ , \*\*\*  $P < 0.001$ , statistically significant.

$\alpha$ -syn



asyn

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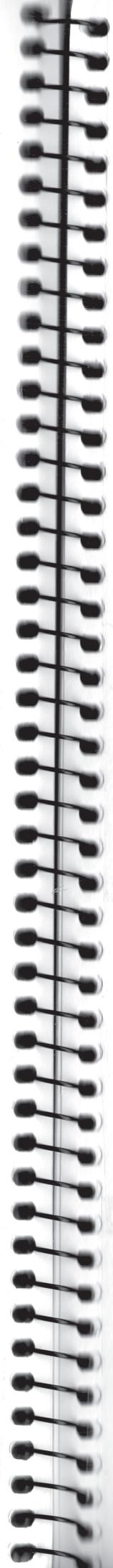
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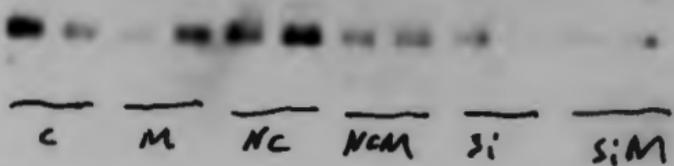
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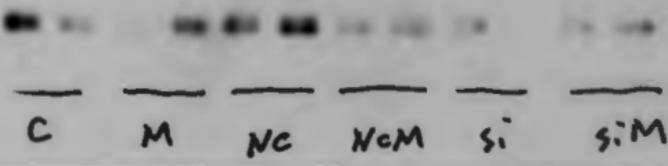
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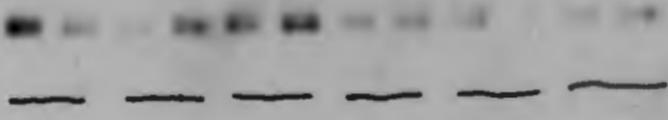
Colony 1



Colony 1



Colony 1



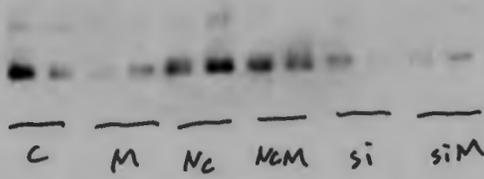
Colony 1



Colony 1



Cathepsin 1



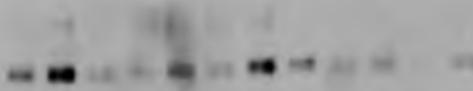
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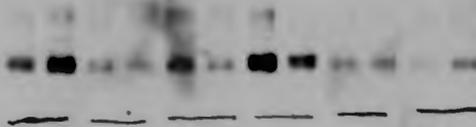
$\beta$ -actin



Cathepsin 2



Cathepsin 2



$\beta$ -actin



Cathepsin D  
1



← 33 ~ 26

Cathepsin D  
1



Cathepsin D  
1



Cathepsin D  
1



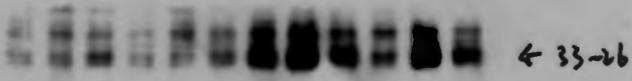
$\beta$ -actin  
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$\beta$ -actin  
1



Cathepsin D  
2



Cathepsin D  
2



Cathepsin D  
2



Cathepsin D  
2

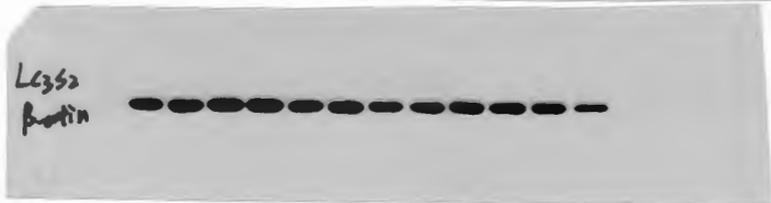
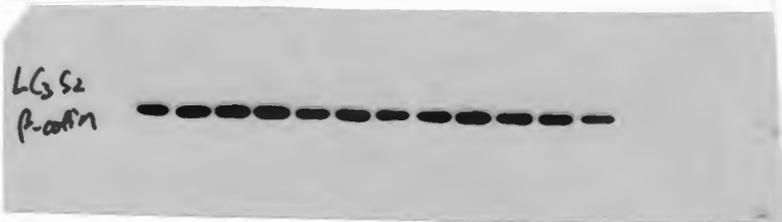
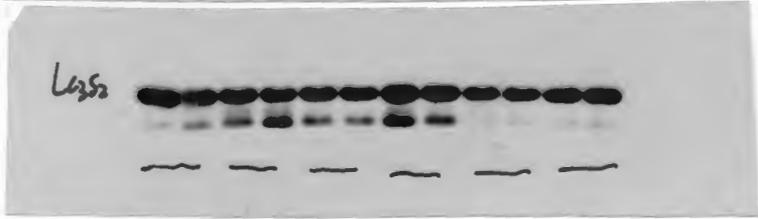
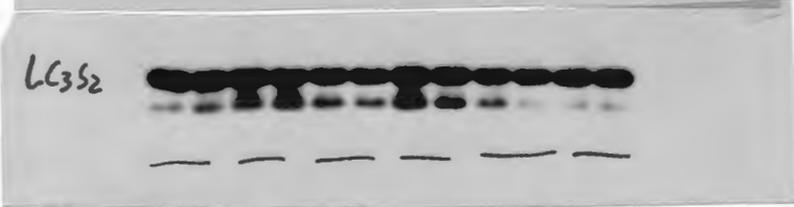
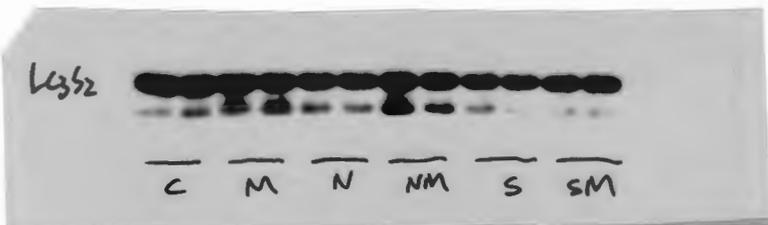
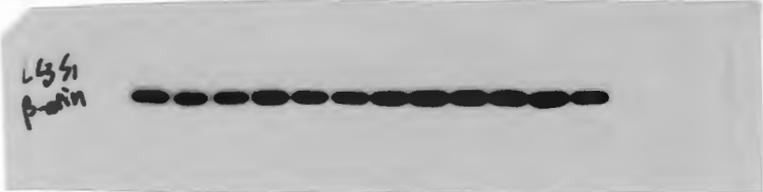
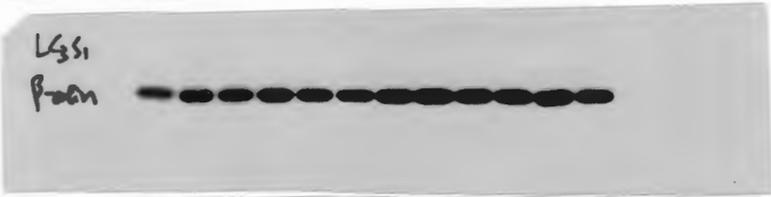
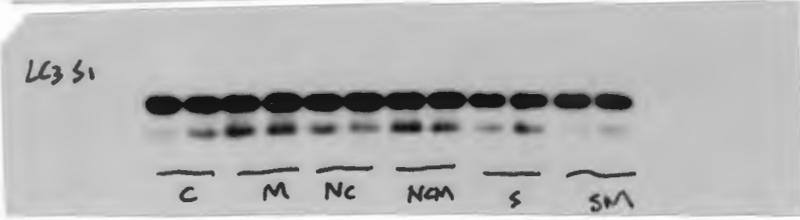
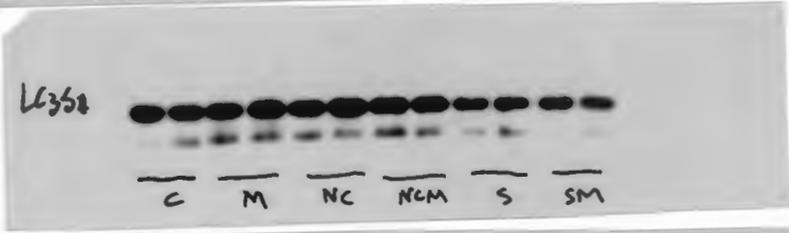
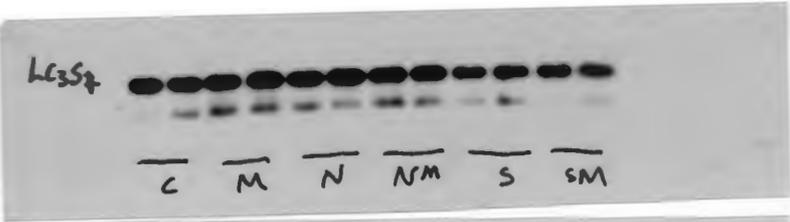


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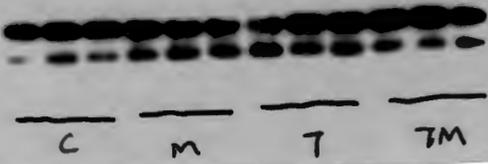


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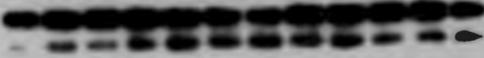




LG3h1



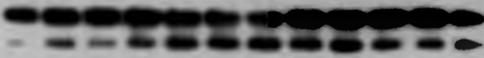
LG3h1



LG3h1



LG3h1



LG3h1  
β-actin



LG3h1  
β-actin



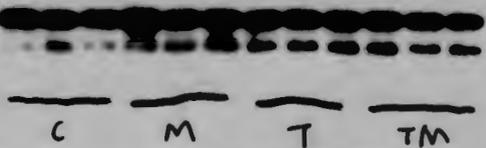
LG3h2



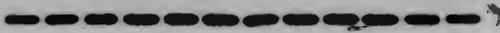
LG3h2



LG3h2

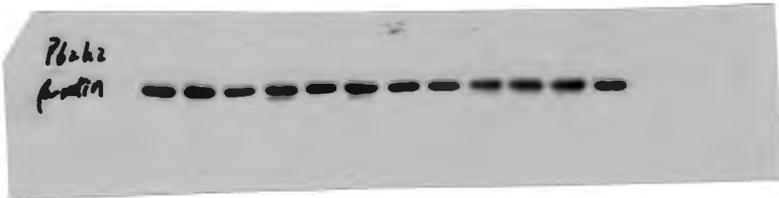
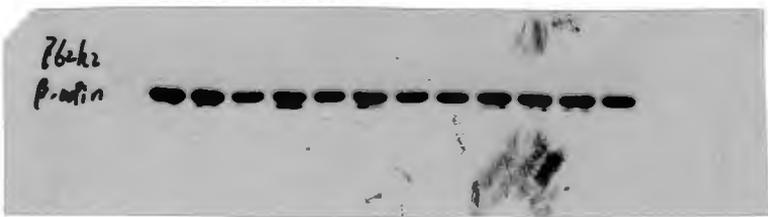
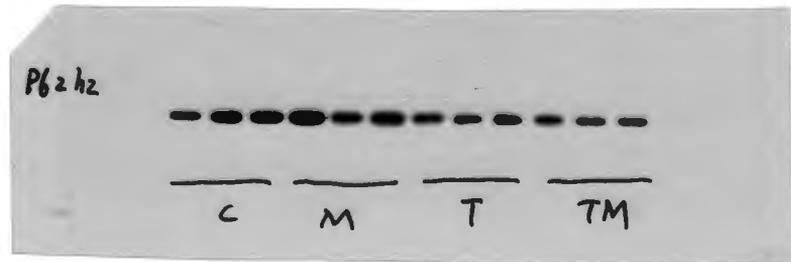
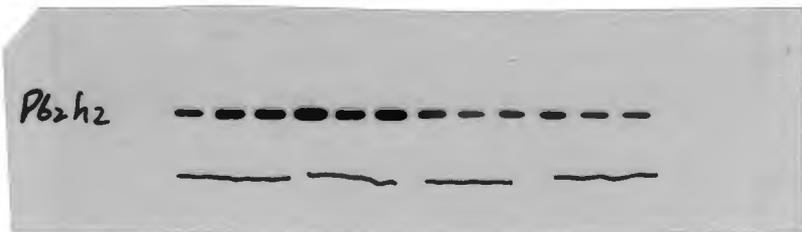
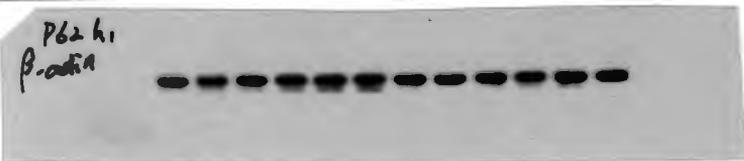
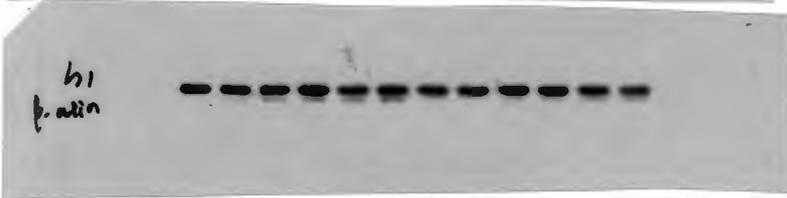
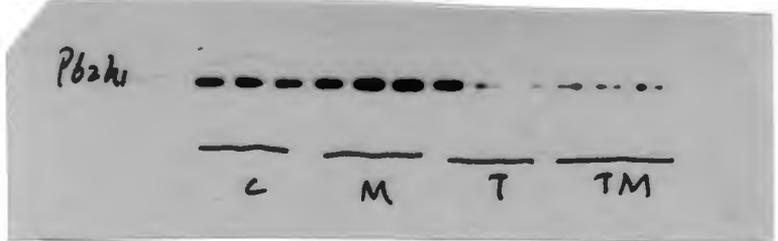
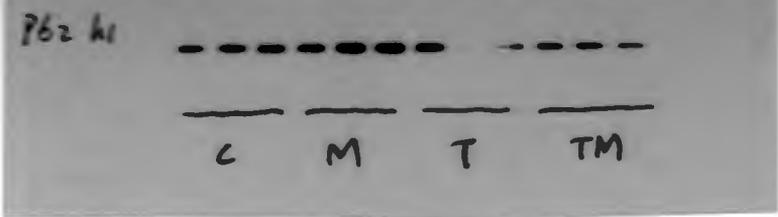


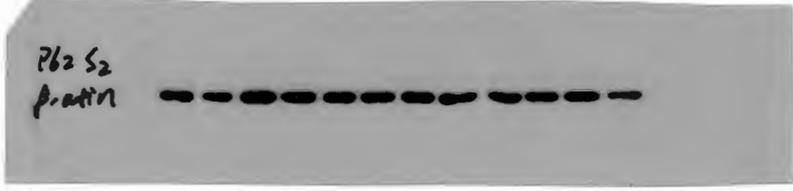
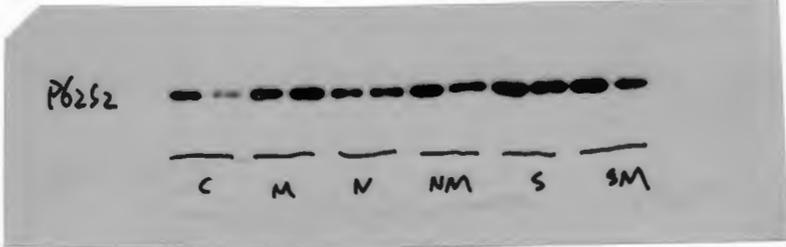
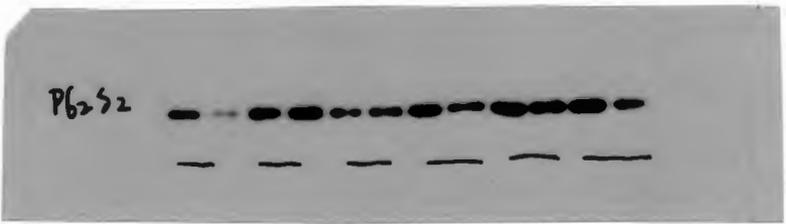
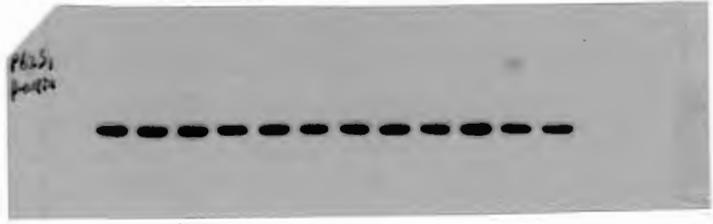
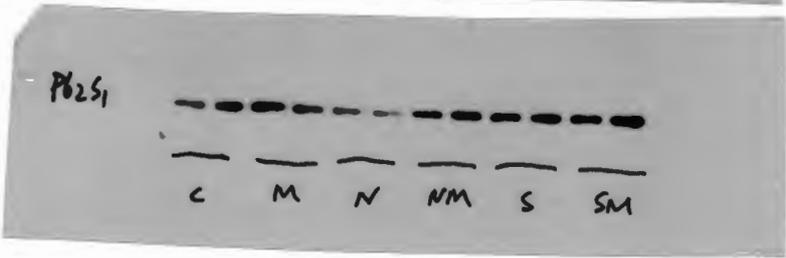
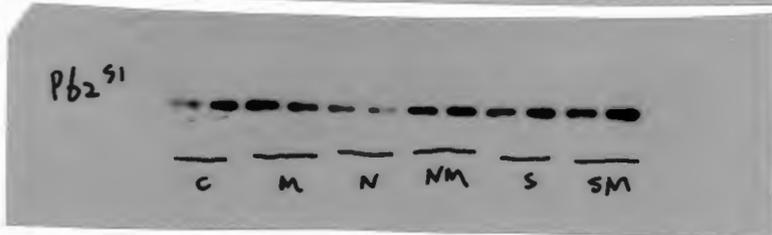
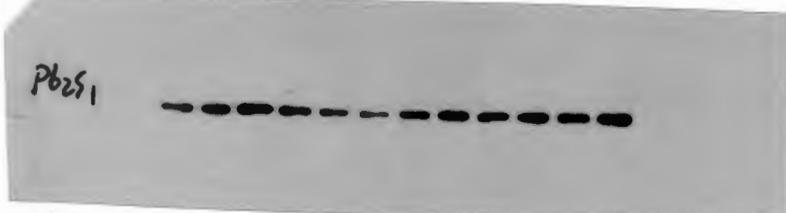
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β-actin



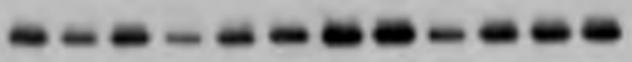
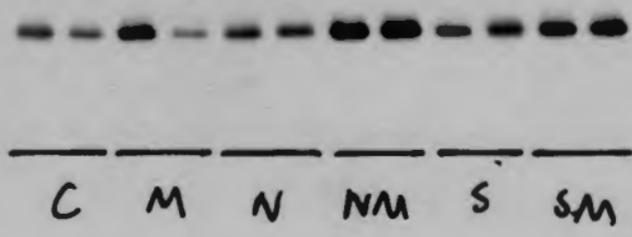
β-actin  
LG3h2







Parkin



$\beta$



Parkin

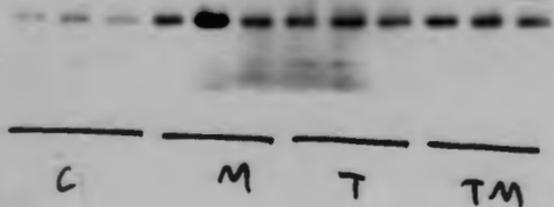


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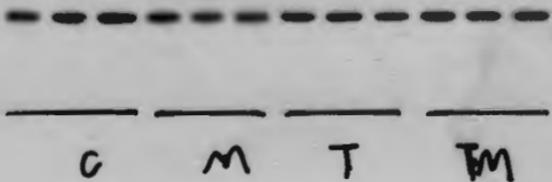
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Parkin



$\beta$



3

Parkin



G

M

T

TM

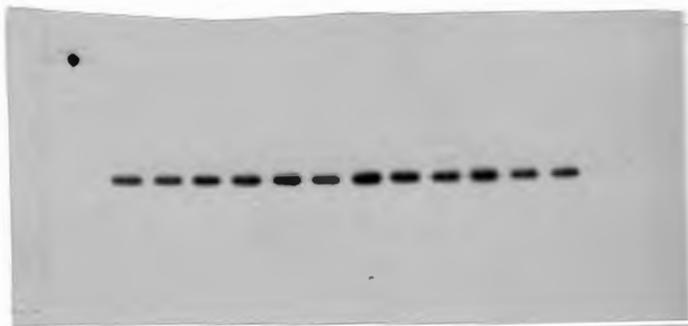
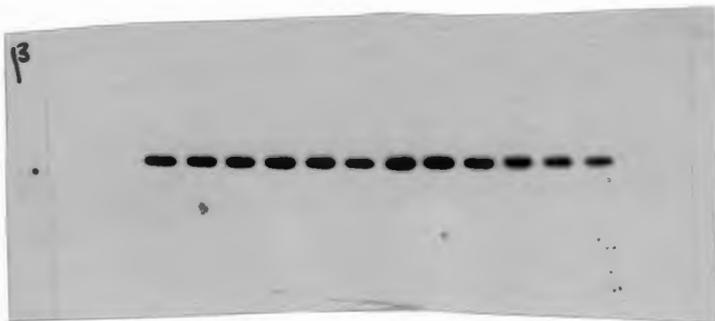
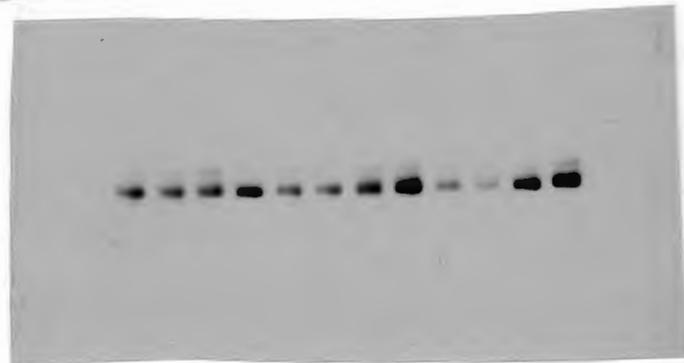
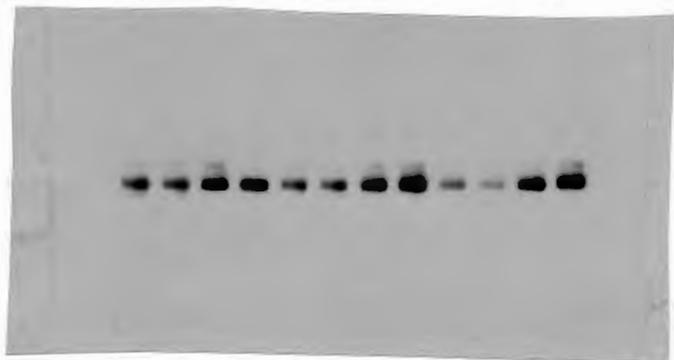
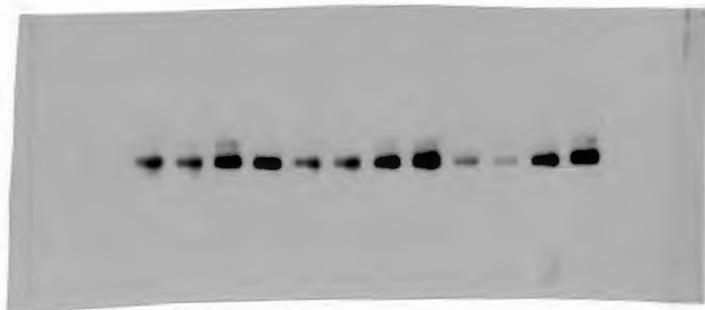
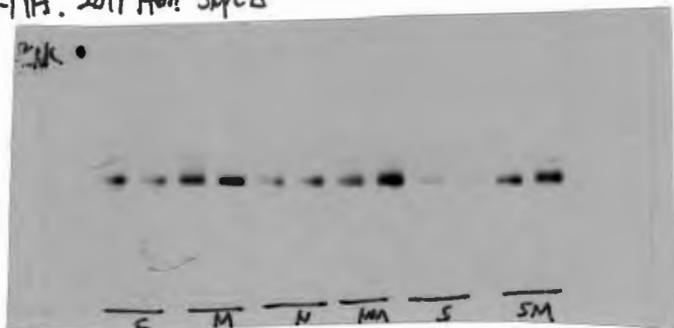
$\beta$



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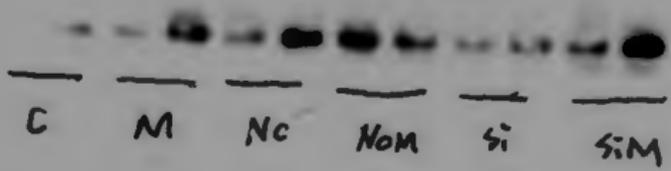
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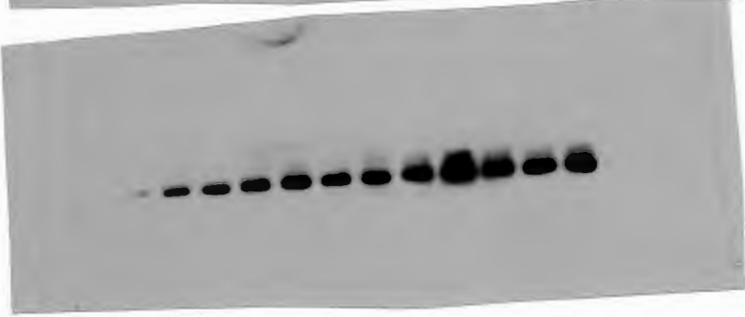
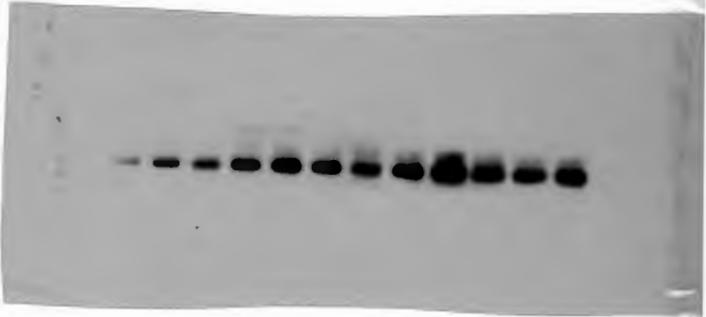
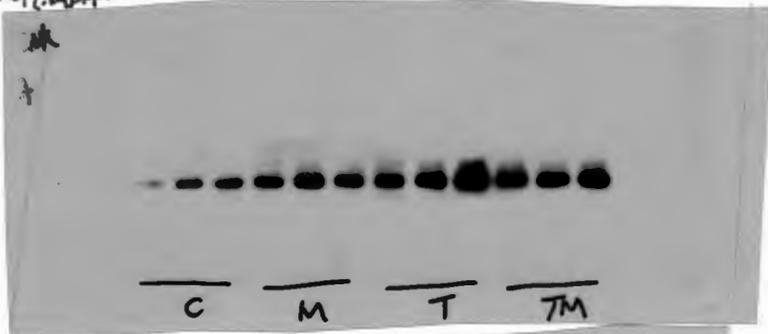
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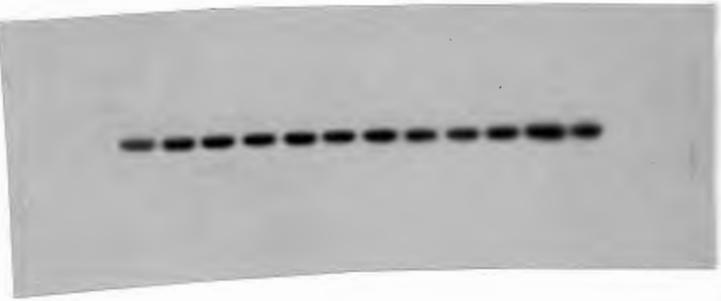
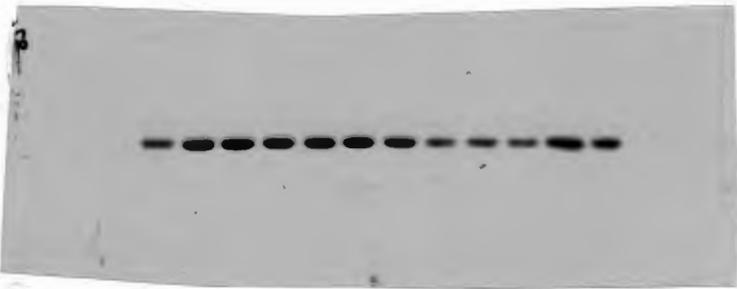
A



2019. 10. 10



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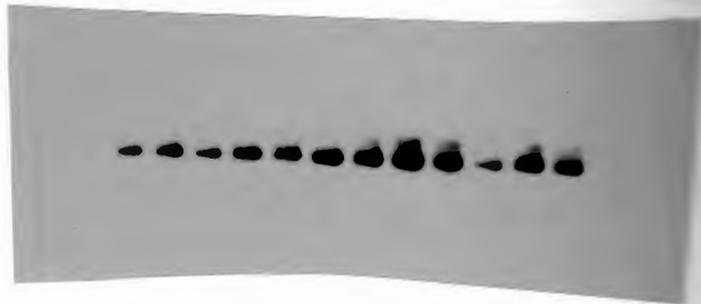
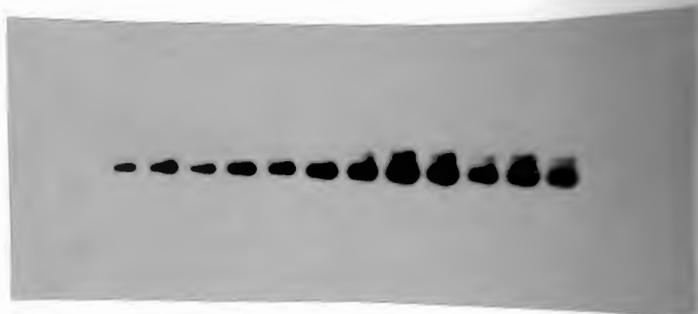


SMPCE 2021426

PINK  
Tm-10  
B



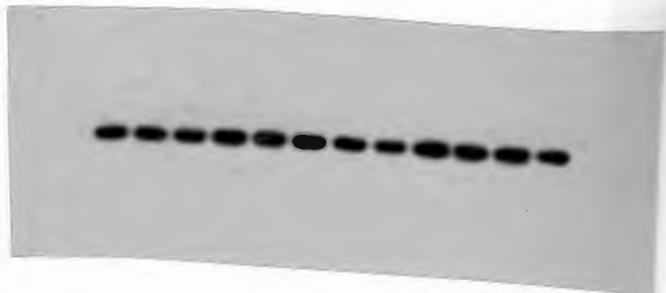
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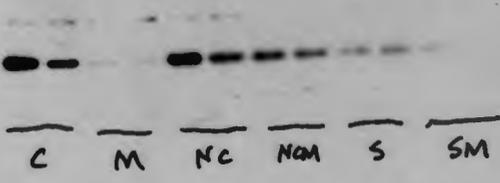
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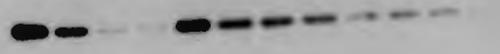
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S1 TH



S1 TH



TH S1



TH S1



TH S1



TH S1

$\beta$ -actin



TH S1

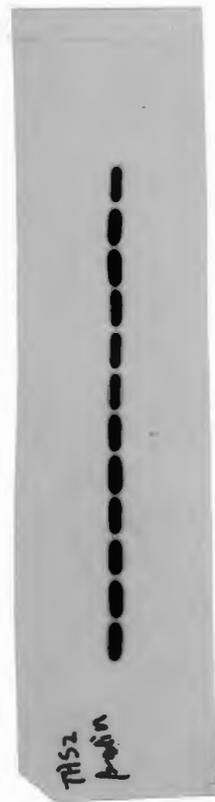
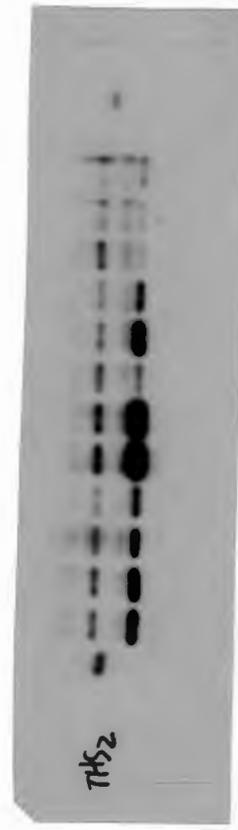
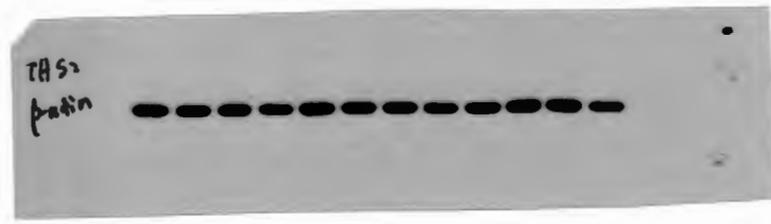
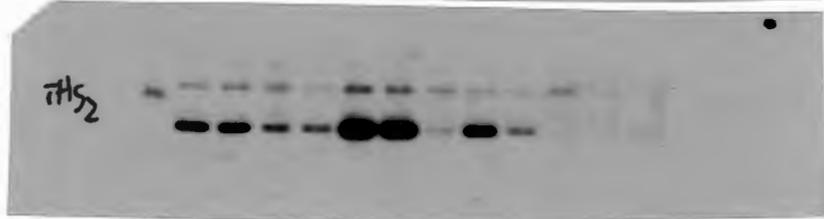
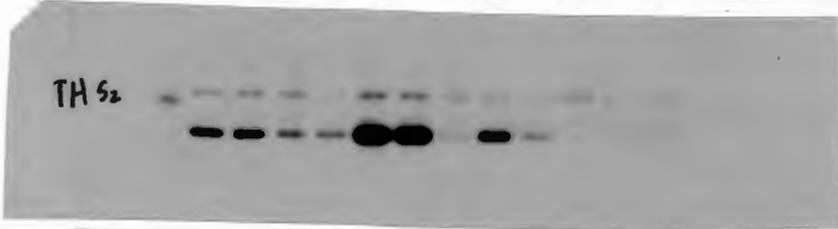
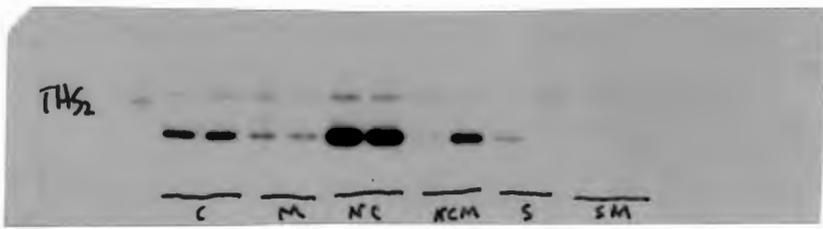
$\beta$ -actin



TH S1

$\beta$ -actin





TH1



TH1



TH1

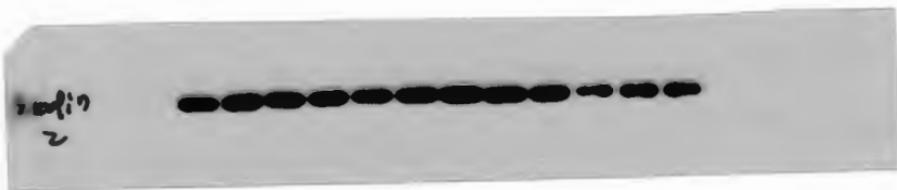
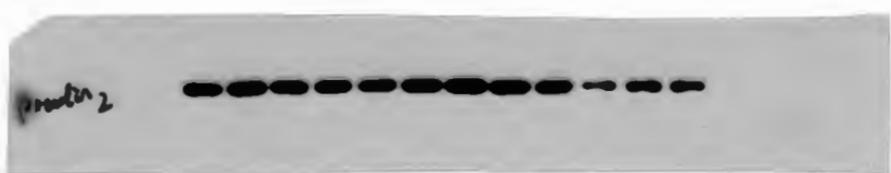
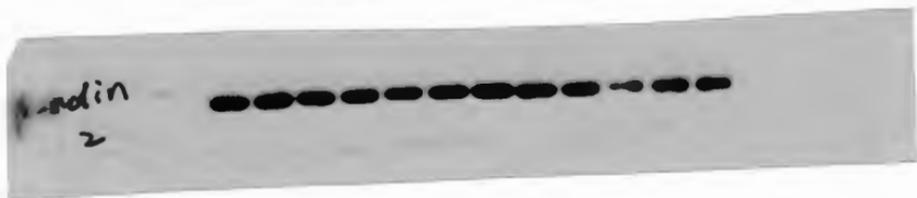
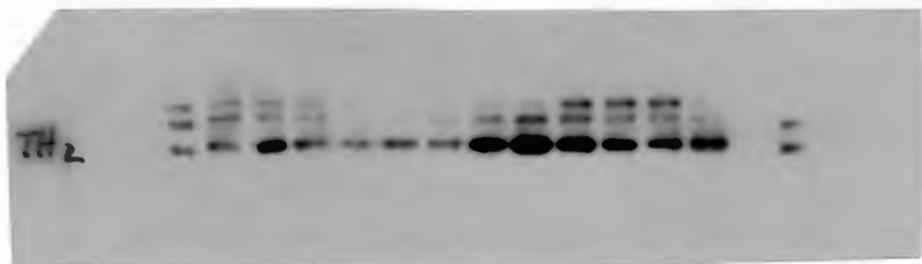
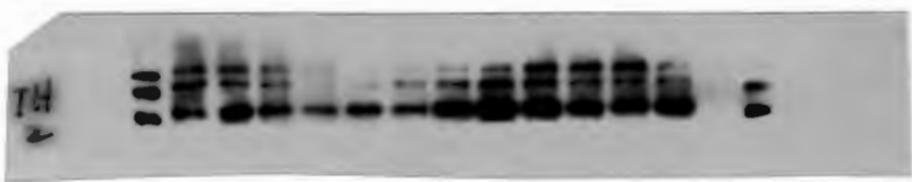
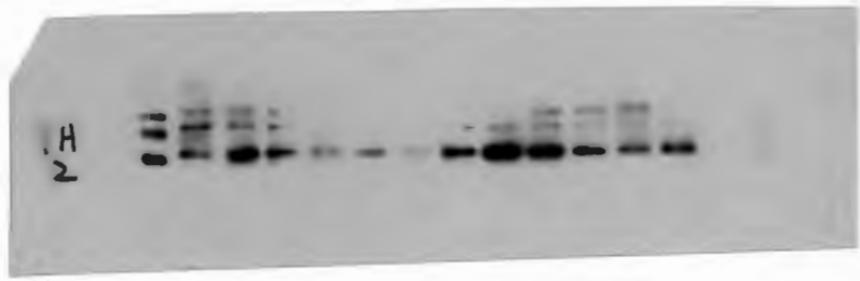


$\beta$ -actin

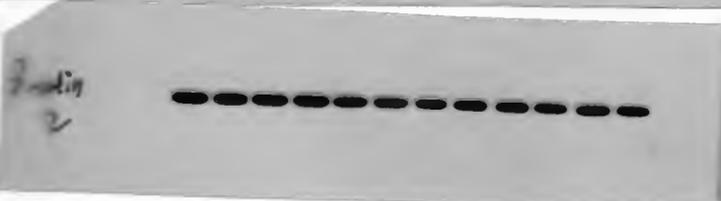
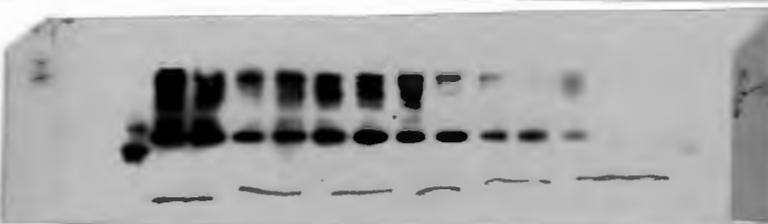
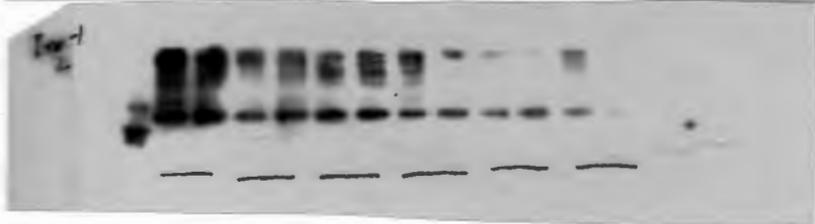
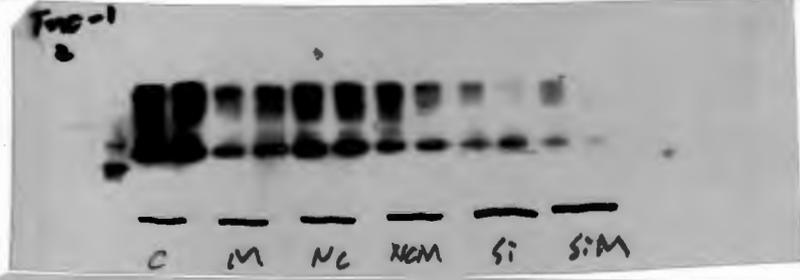
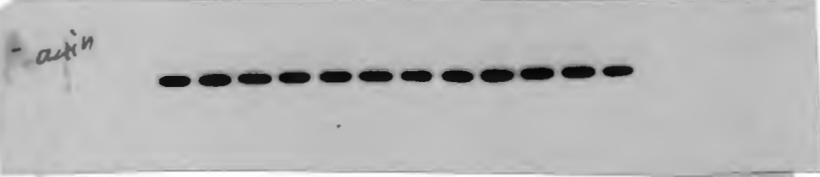
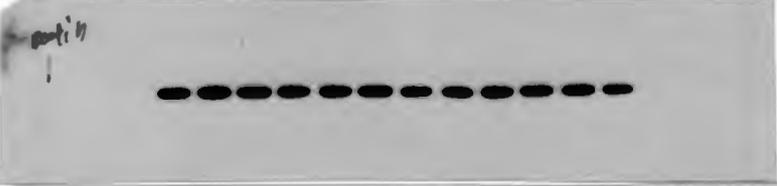
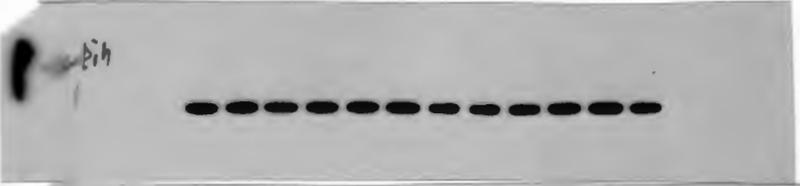
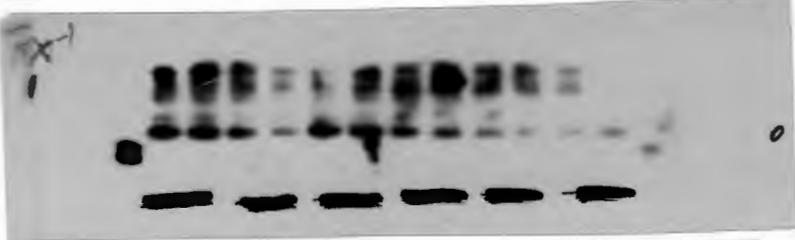
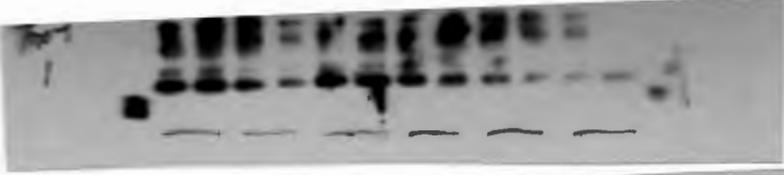


$\beta$ -actin





# PV 衍表达



Tro-1  
1



✓

Tro-1  
1



✓

Tro-1  
1



Tro-1  
1



$\beta$ -actin  
1



✓

$\beta$ -actin  
1



$\beta$ -actin  
1



Trp-2  
2



Trp-1  
2



Trp-1  
2



— C — M — T — TM

$\beta$ -actin  
2



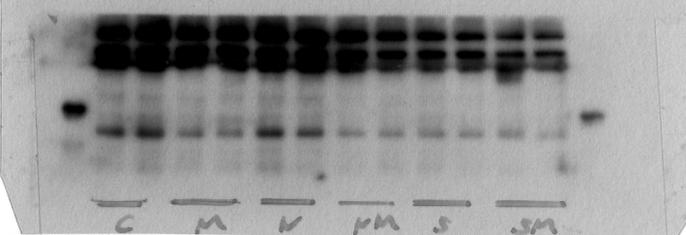
$\beta$ -actin  
2



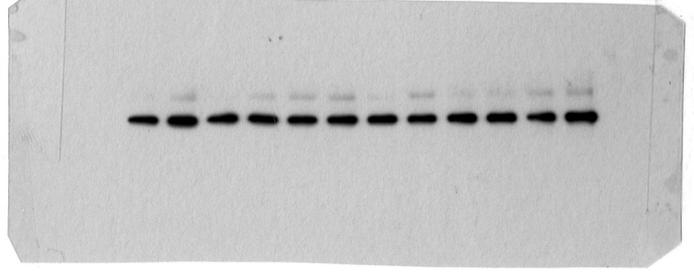
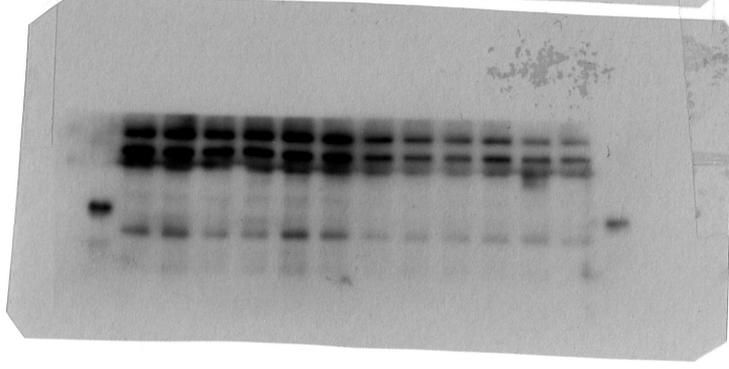
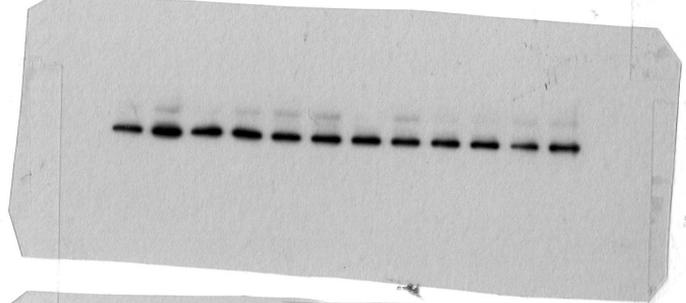
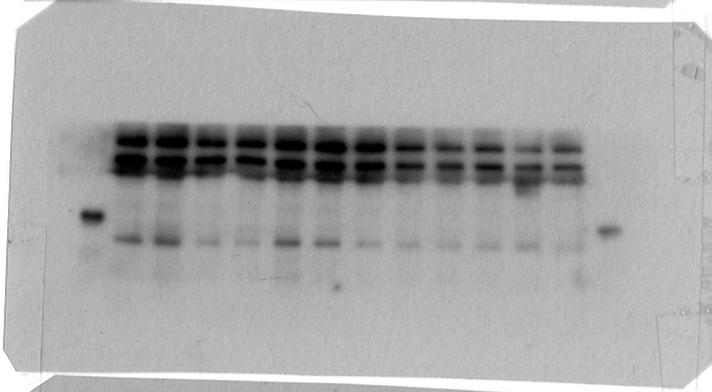
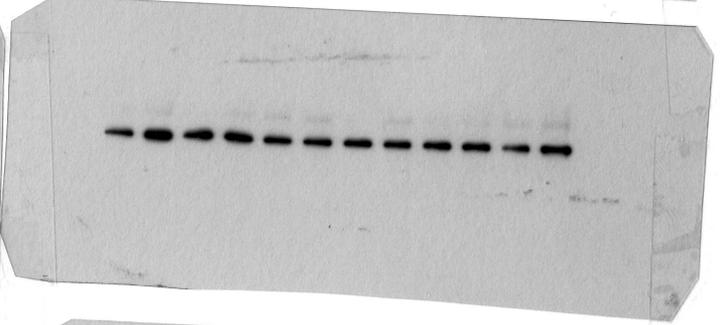
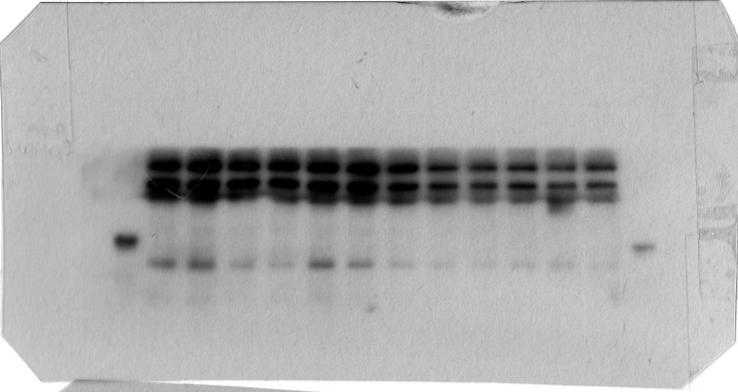
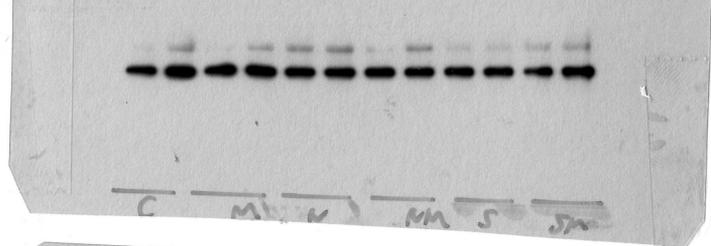
$\beta$ -actin  
2

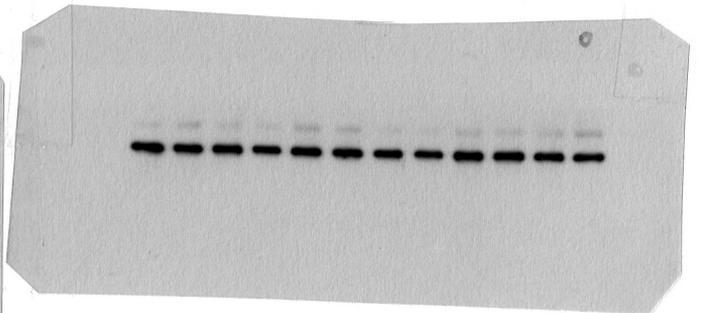
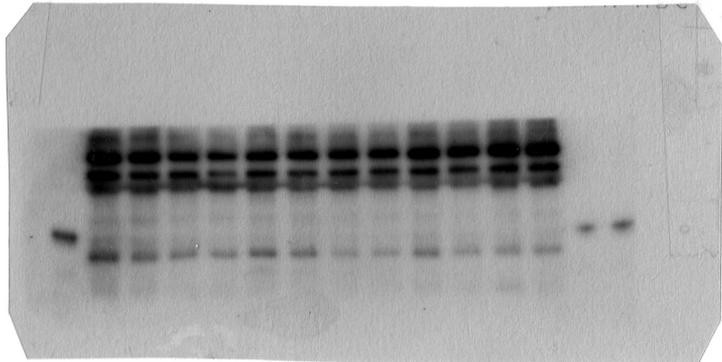
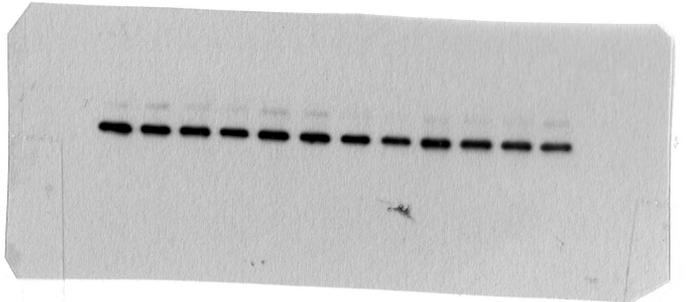
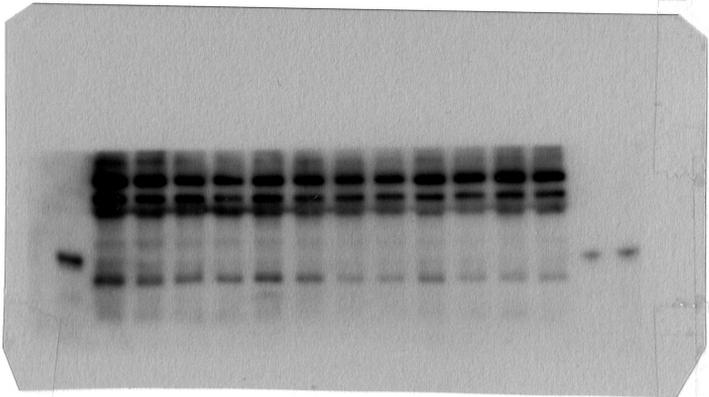
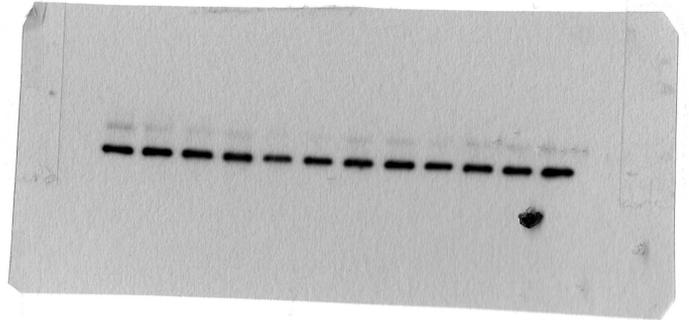
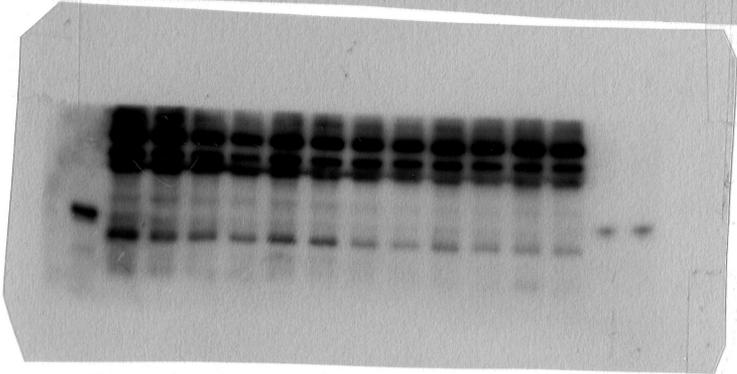
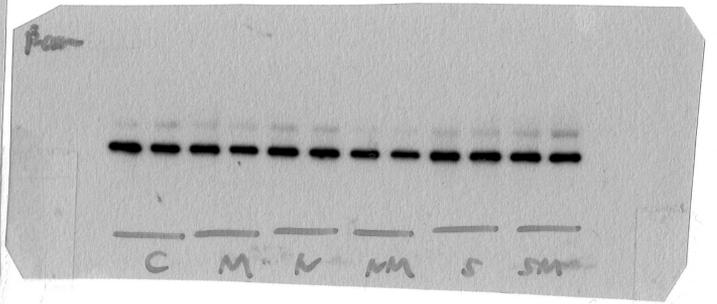
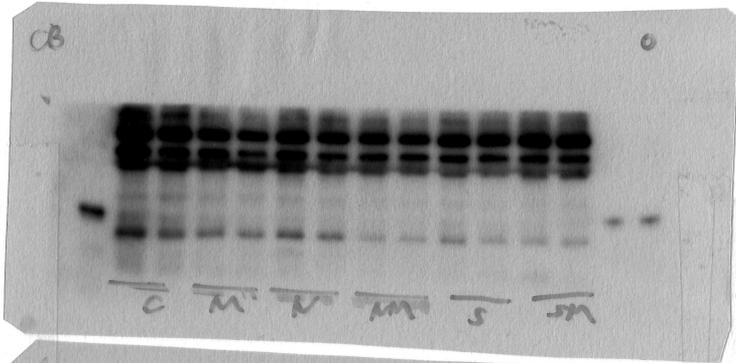


CB

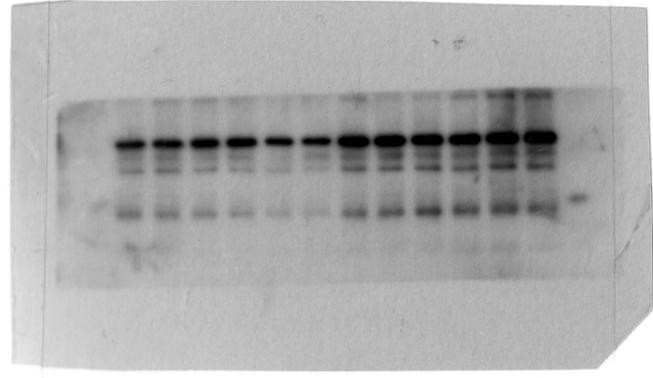
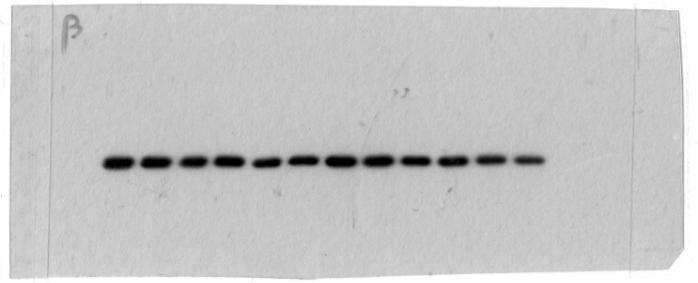
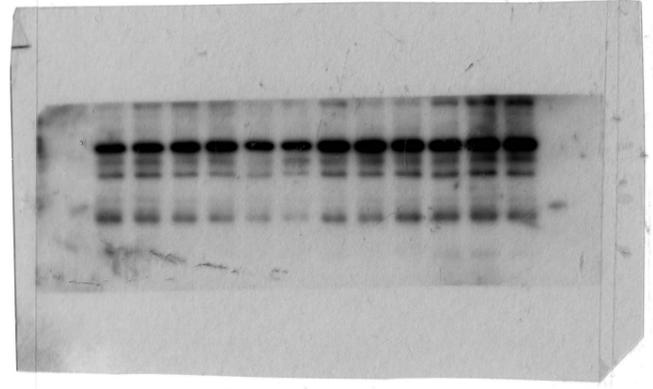
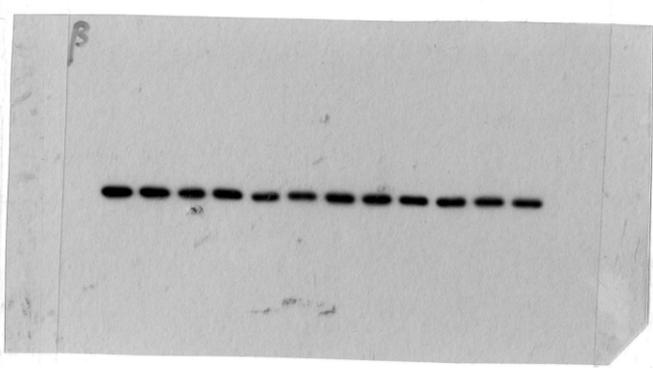
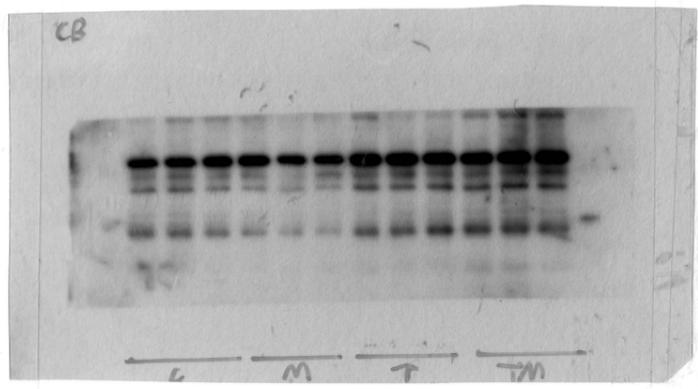
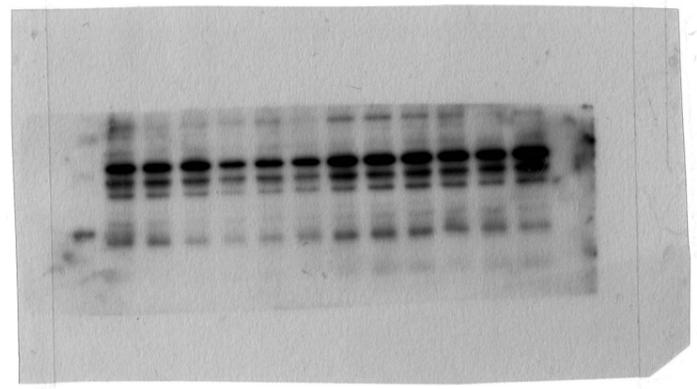
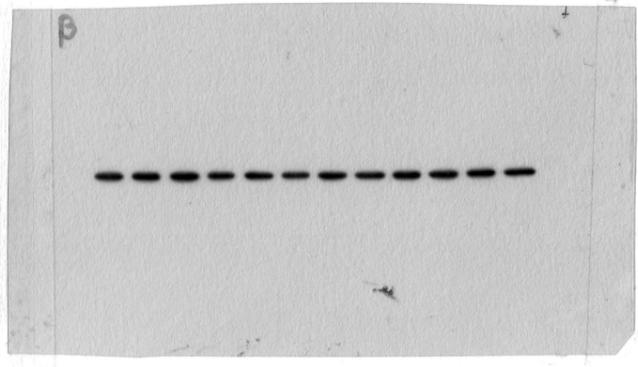
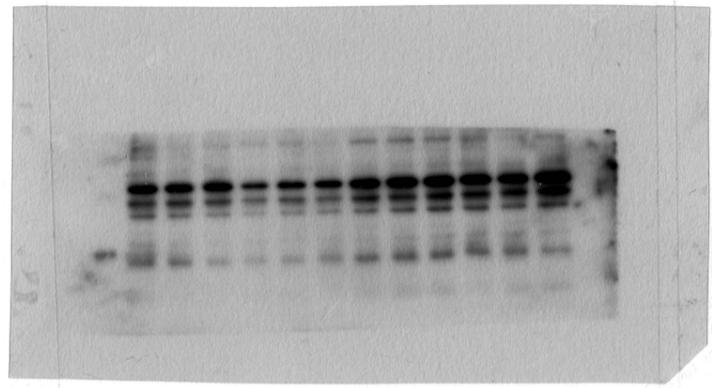
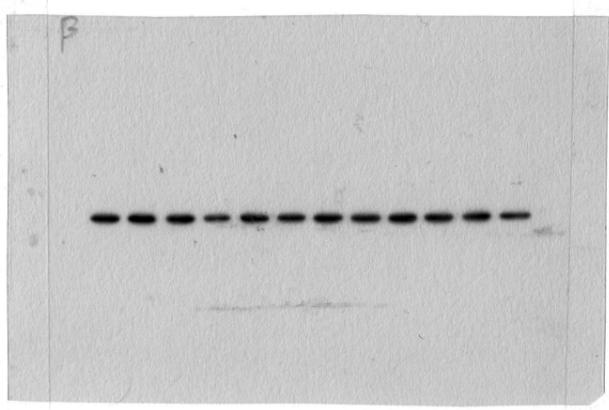
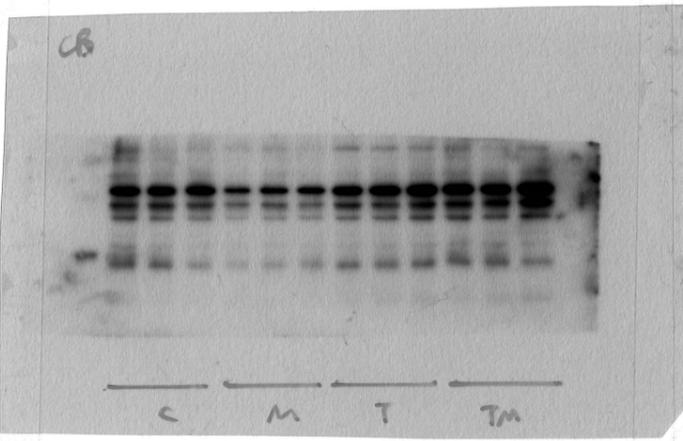


Fam





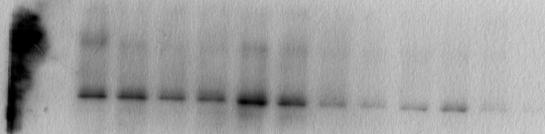
TvV 高表达 Cathepsin B SNPC 2023.12.8



LAMP2



LAMP2



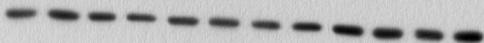
LAMP2



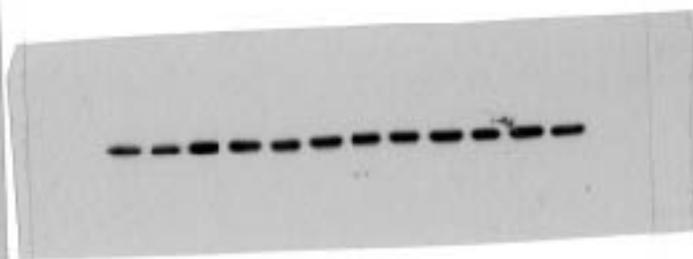
$\beta$ -actin



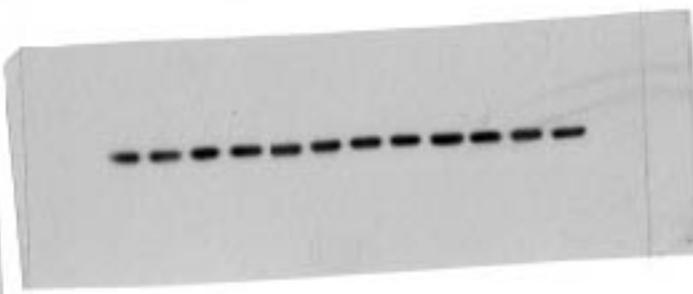
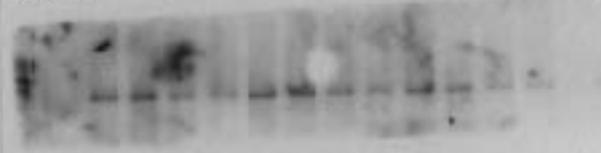
$\beta$ -actin



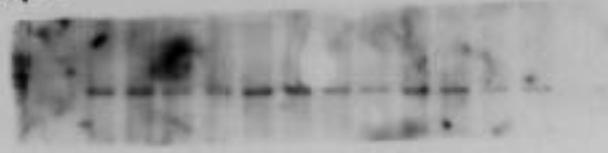
Lamp 2-2

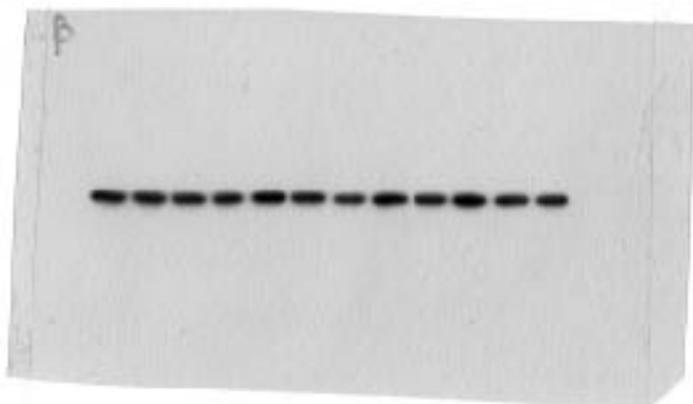
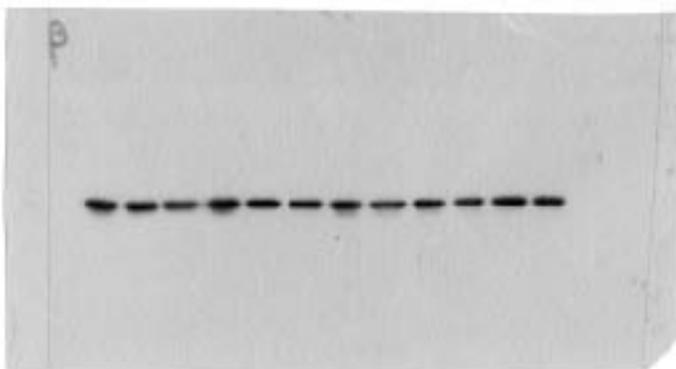
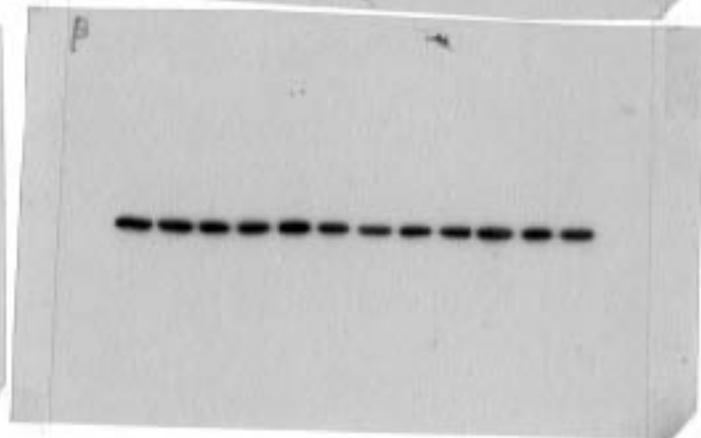
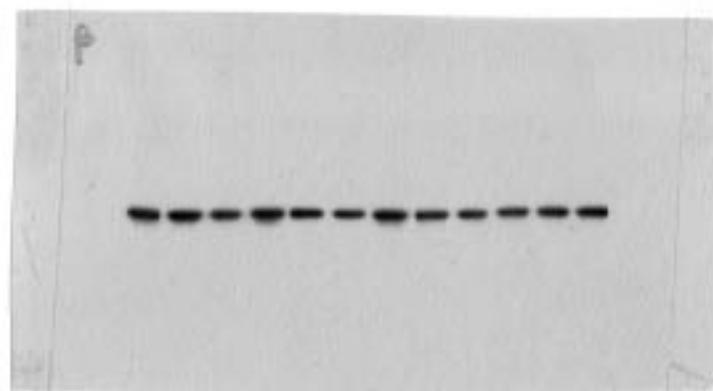
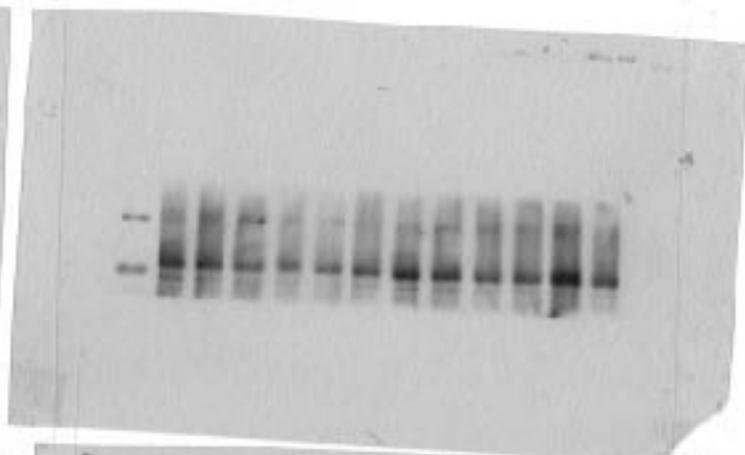
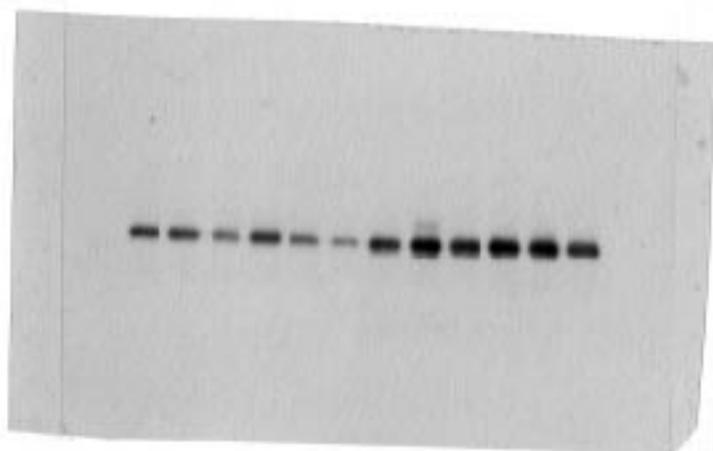
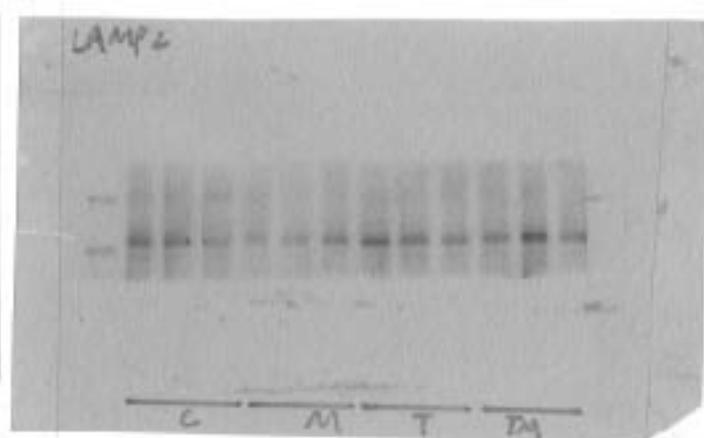
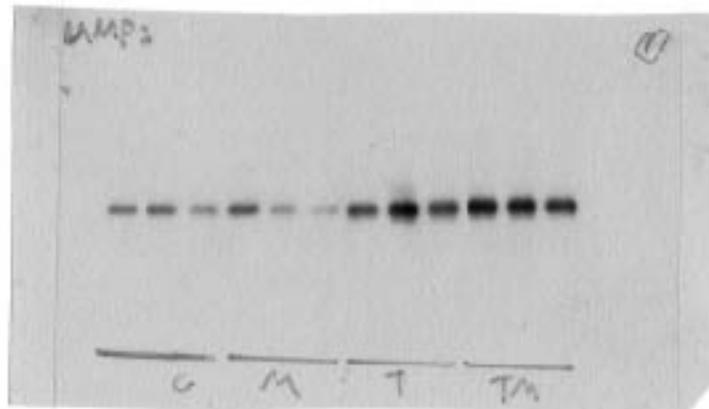


Lamp 2-2



Lamp 2-2





2021.10.19. Trx 低表达模型 SNpc

Cathepsin D



C M N NM S SM

