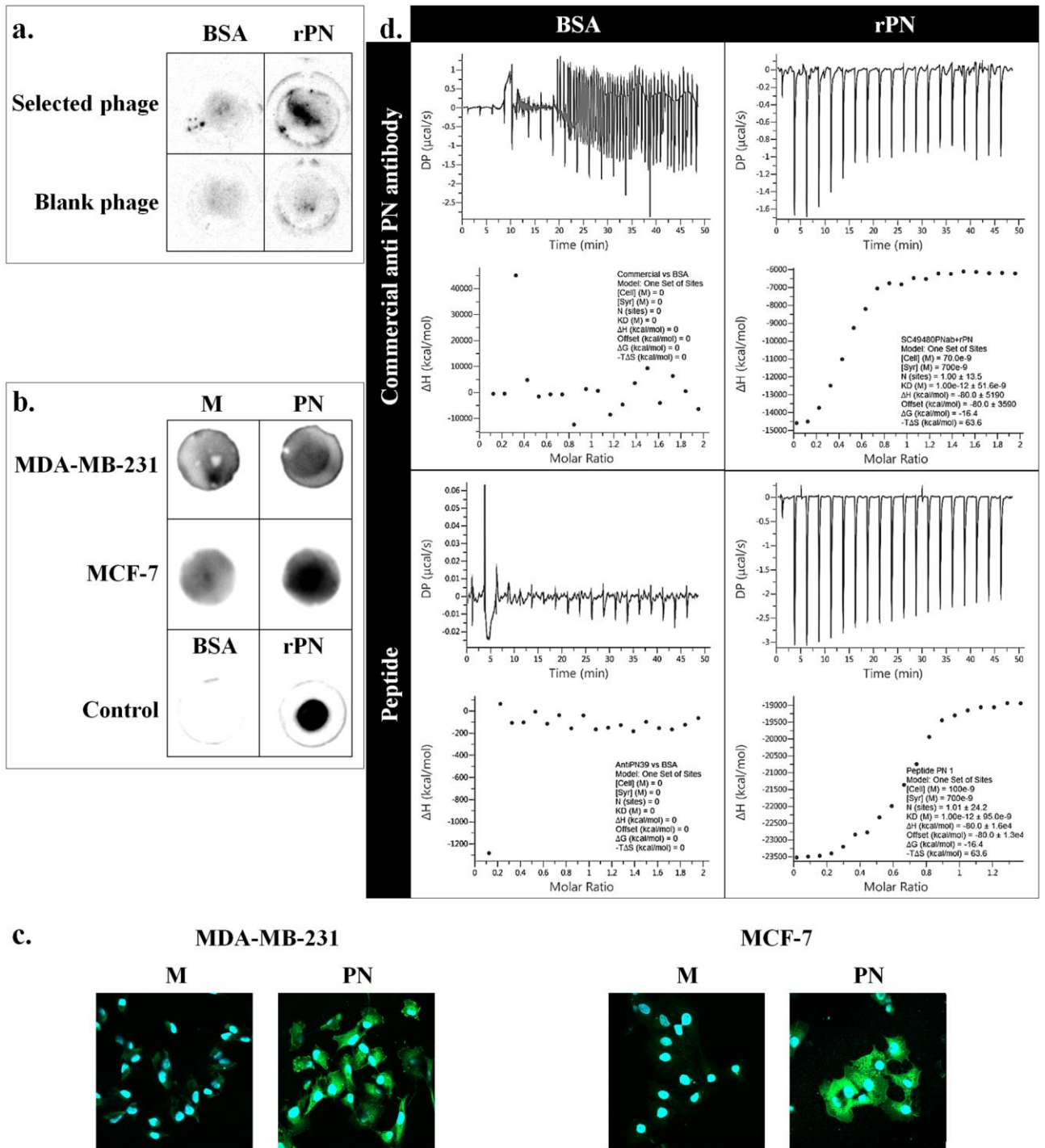


This document provided the whole picture of gel or membrane used in this manuscript. Figures that used these picture were placed before the uncropped picture

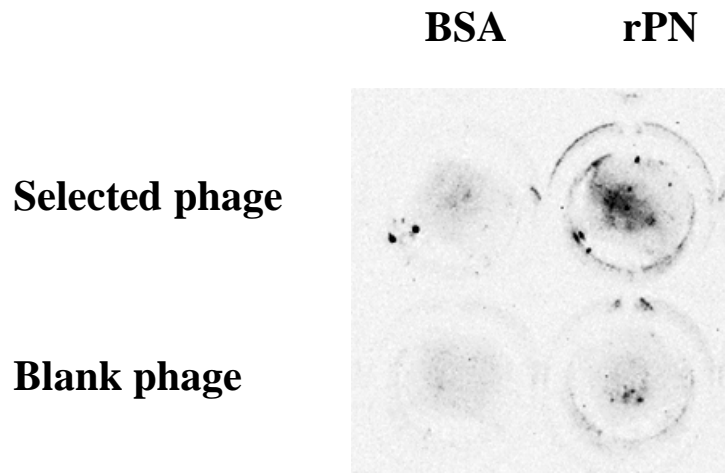
**Fig. 1**



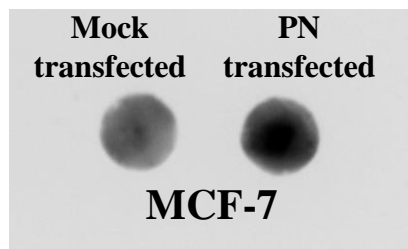
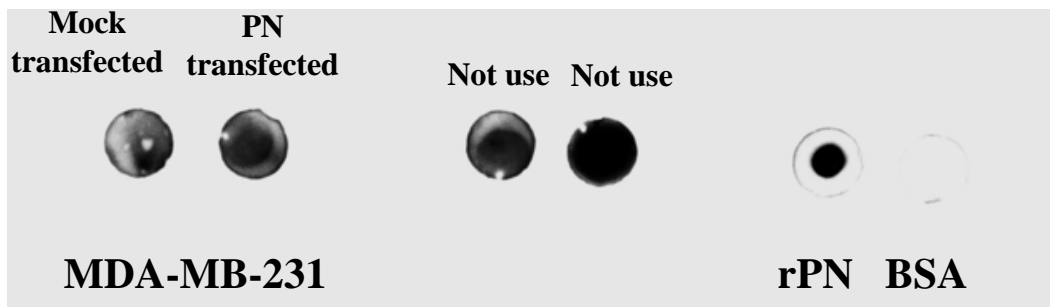
**Fig. 1** Binding of anti-PN peptide to PN. (a) Phage binding to rPN, compared with blank phage and BSA was used as the negative control, (b) Peptide binding to PN-transfected BCA cells compared with mock transfected BCA cells and BSA/ was used rPN as negative/positive control (M = mock transfected and PN = PN-transfected) and (c) Isothermal titration calorimetry analysis diagram from binding between anti-PN peptide and BSA or rPN compared with commercial anti-PN antibody.

**Fig. 1**

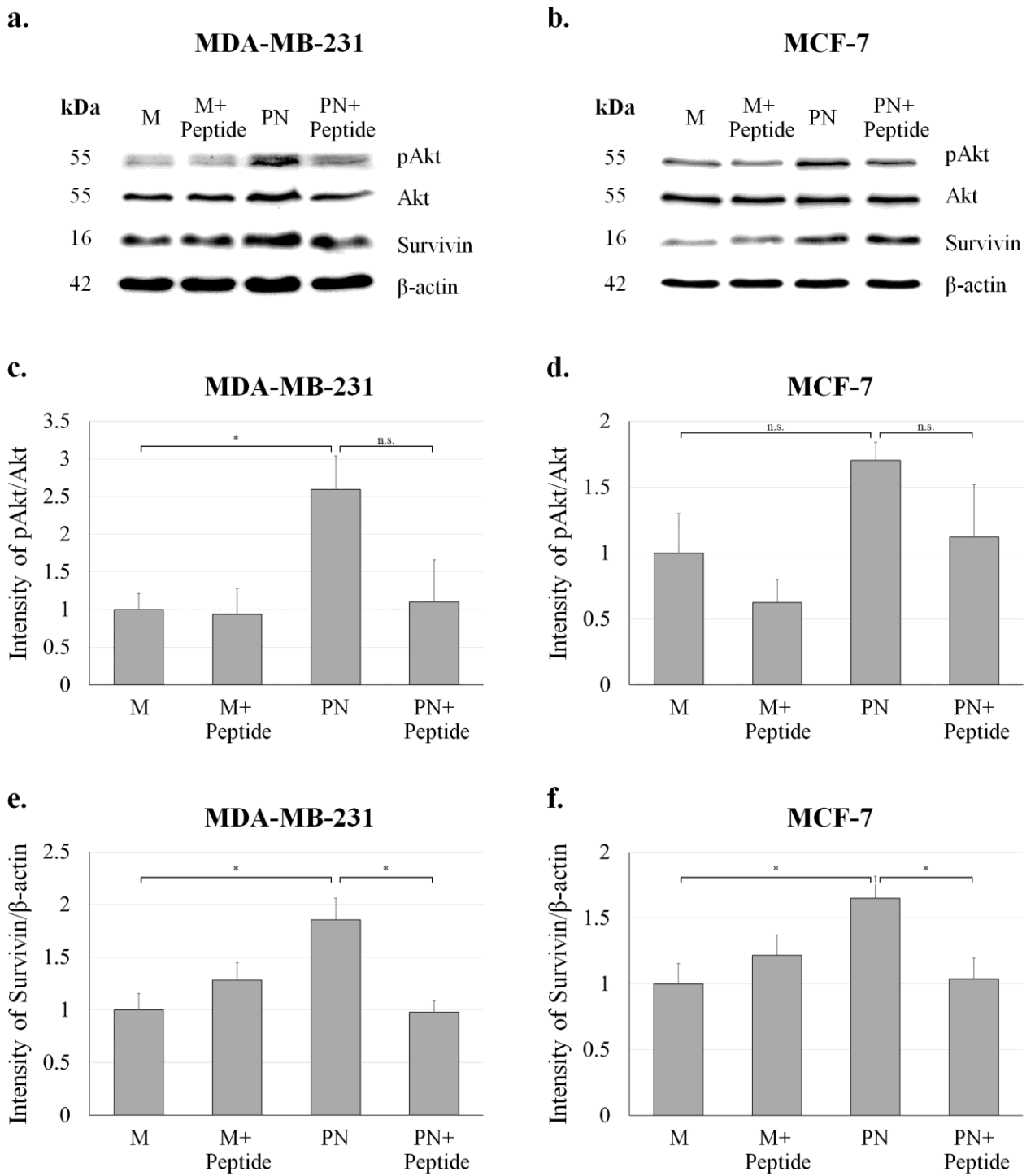
**Fig. 1a**



**Fig. 1b**



**Fig. 4**

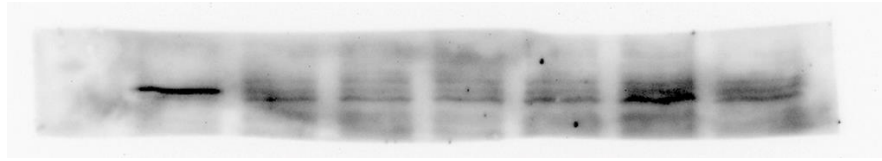


**Fig. 4** Western blot analysis for expression of pAKT and survivin. (a-b) Signal from immunodetection of pAkt, Akt, survivin and  $\beta$ -actin as the internal control. (c-d) Intensity of pAKT normalized by Akt expression. (e-f) Intensity of survivin normalized by  $\beta$ -actin expression. M = mock transfected, PN = PN-transfected, error bar determined SEM, \* =  $P$ -value  $<0.05$  and n.s. = not significant.

**Fig. 4a**

Not use    Not use    M    M+ Peptide    Not use    PN    PN+ Peptide

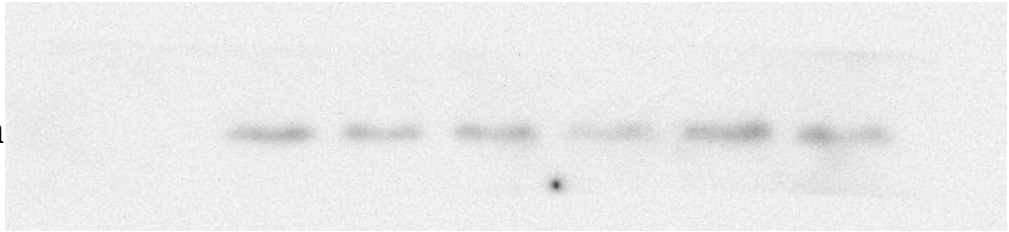
**pAkt**



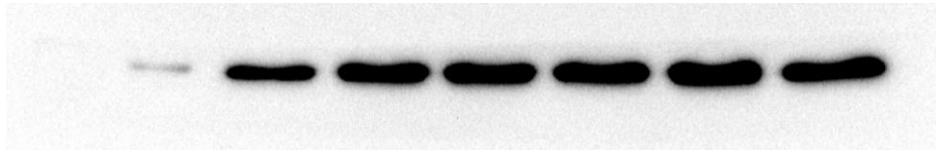
**Akt**



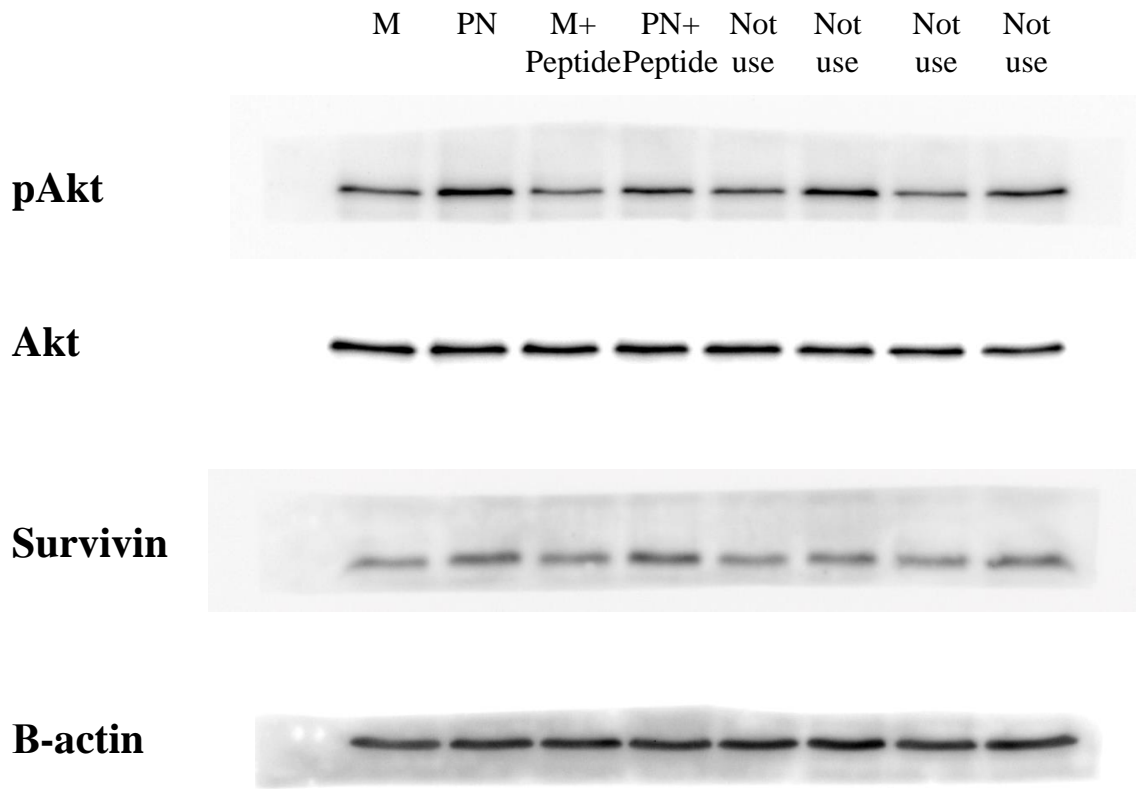
**Survivin**



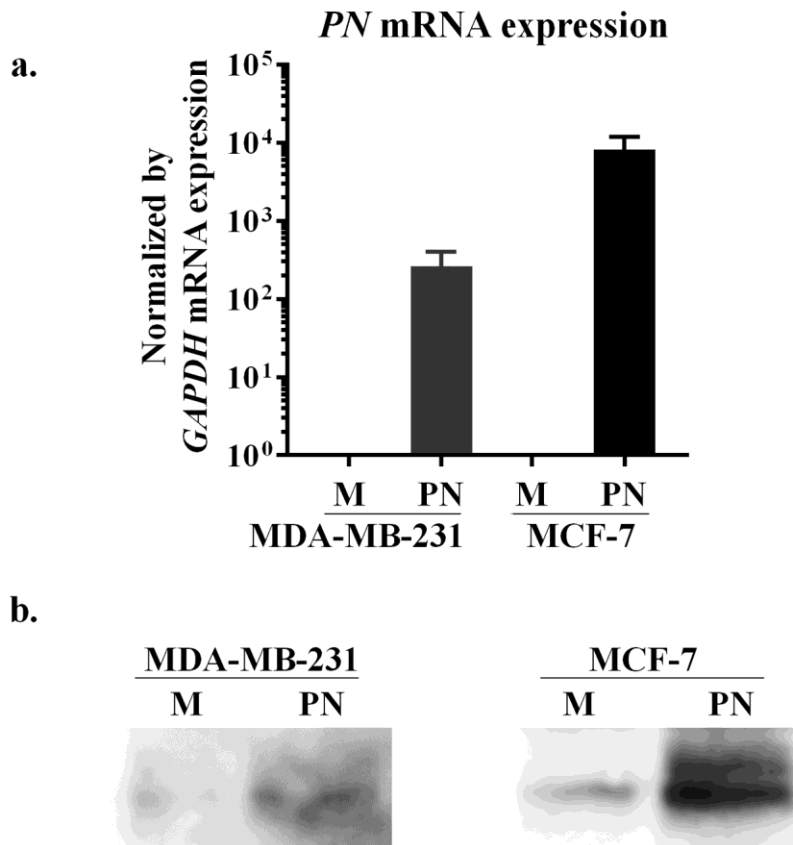
**B-actin**



**Fig. 4b**



**Fig. S3**

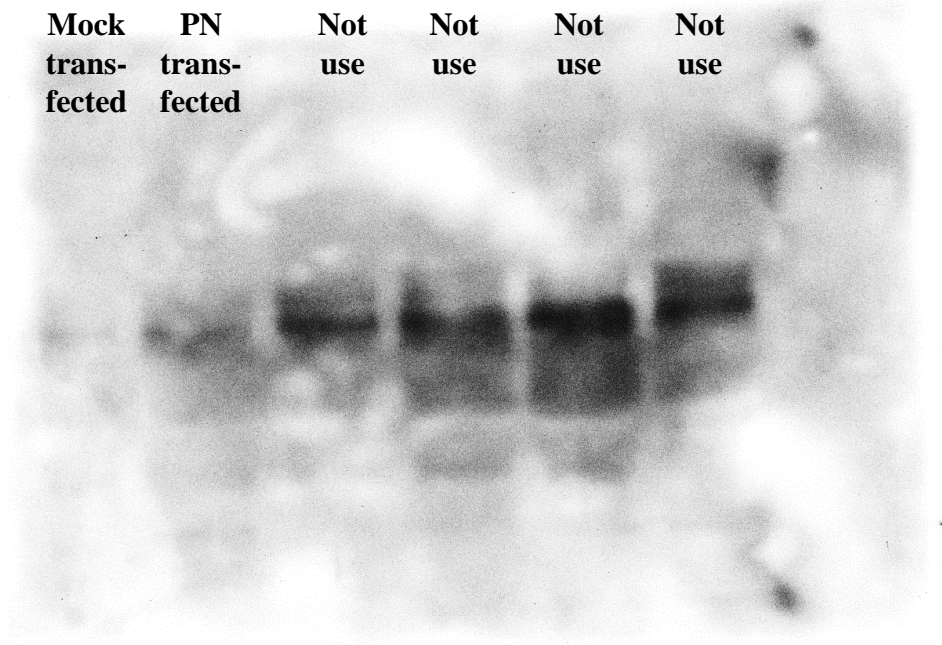


**Fig. S3** Detection of PN in PN- and mock transfected BCA cell lines. (a) Detection of mRNA expression by real time RT-PCR and (b) Detection of PN protein in condition medium by western blot analysis. All cells showed increasing of PN signal in PN-transfected condition compared to mock cells by adjusting equal protein loading. M = mock transfected and PN = PN-transfected, error bar determined SEM.

**Fig. S3**

Mock trans-  
fected    PN trans-  
fected    Not use    Not use    Not use    Not use

**MDA-MB-231**



Not use    Not use    Not use    Not use    Mock trans-  
fected    PN trans-  
fected    Not use    Not use    Not use    Not use

**MCF-7**

