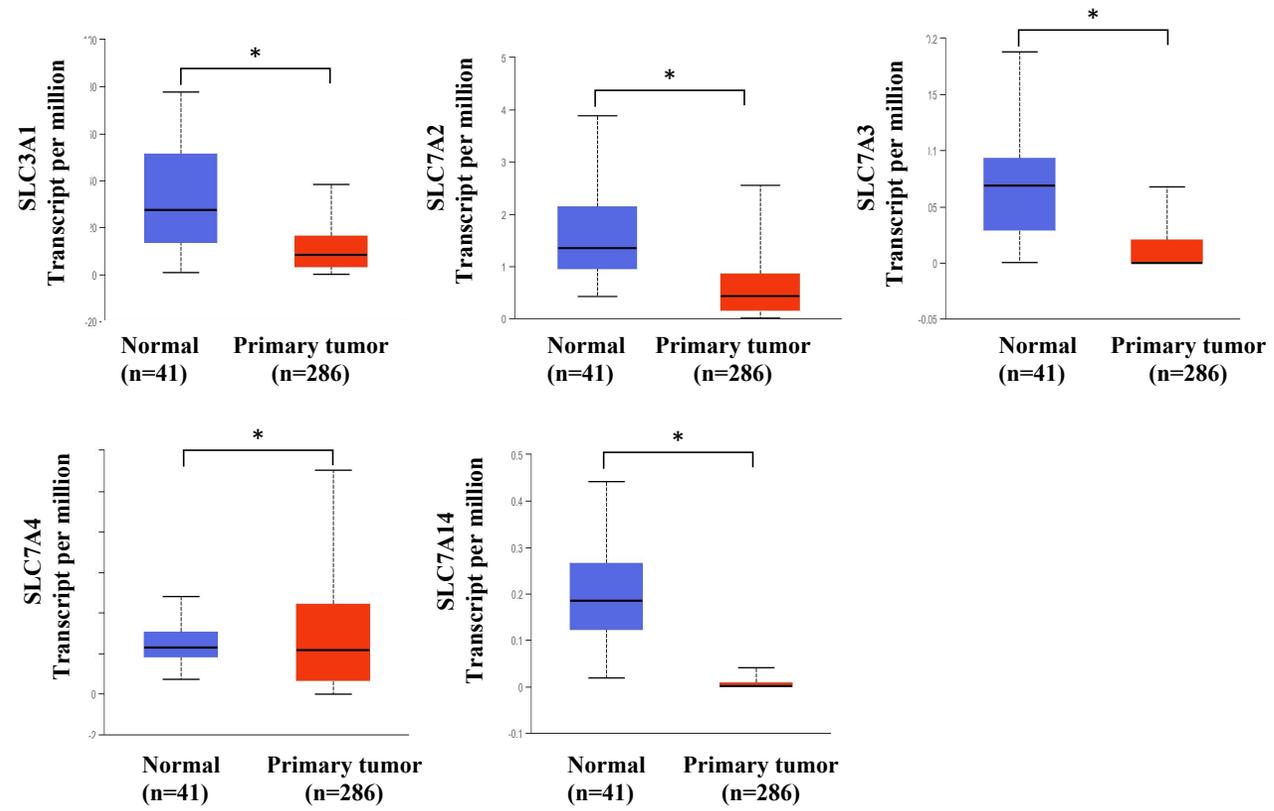
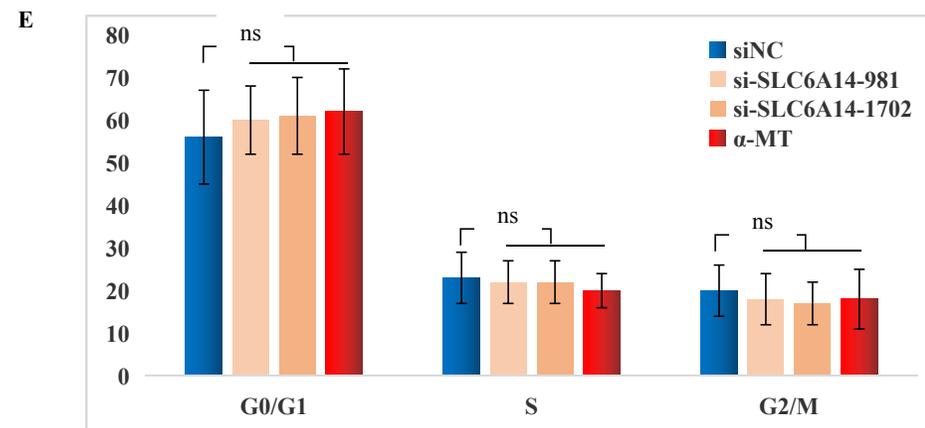
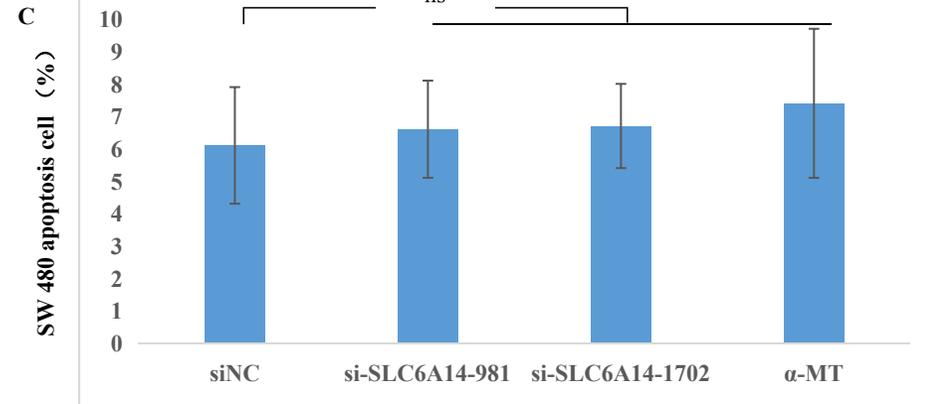
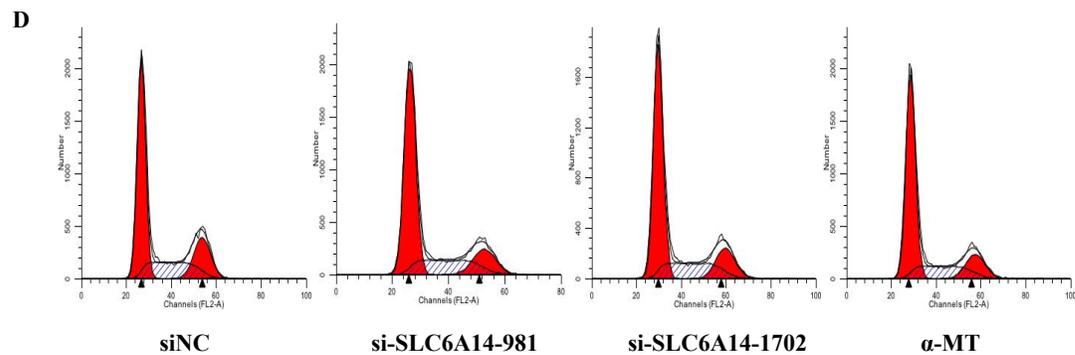
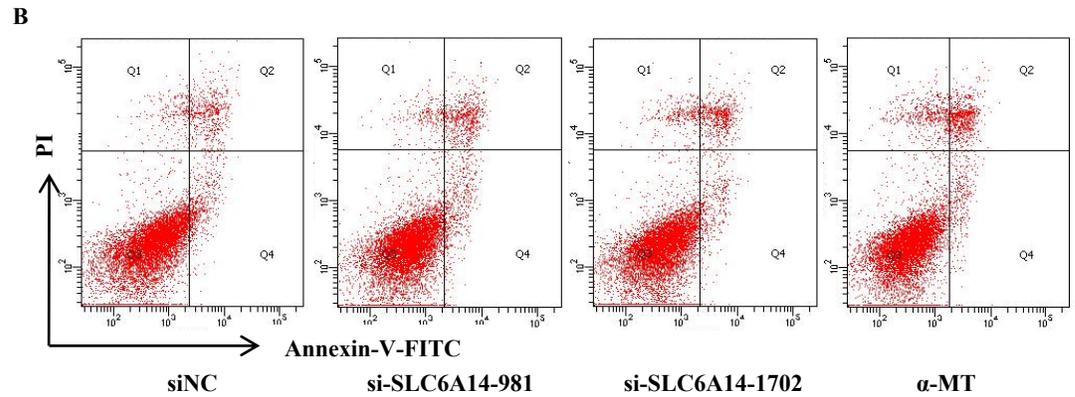
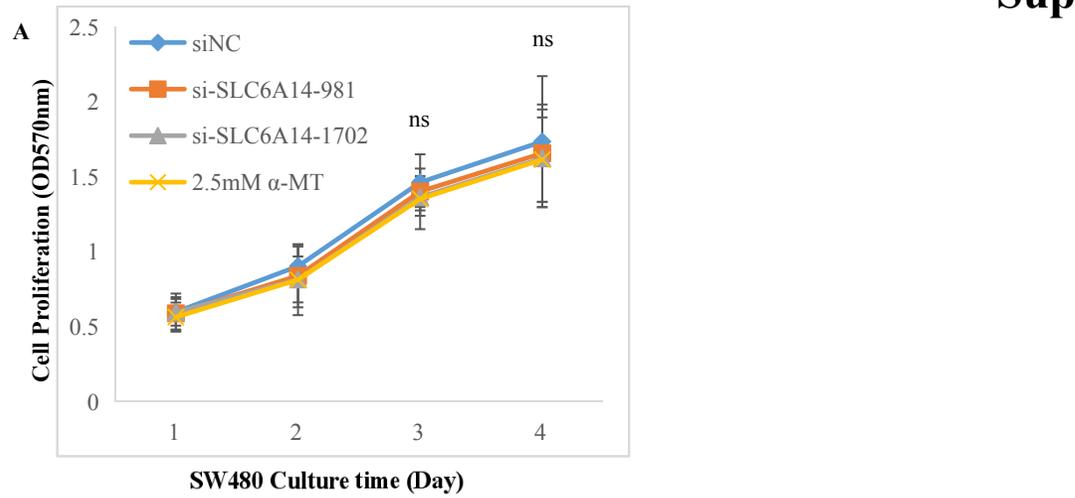


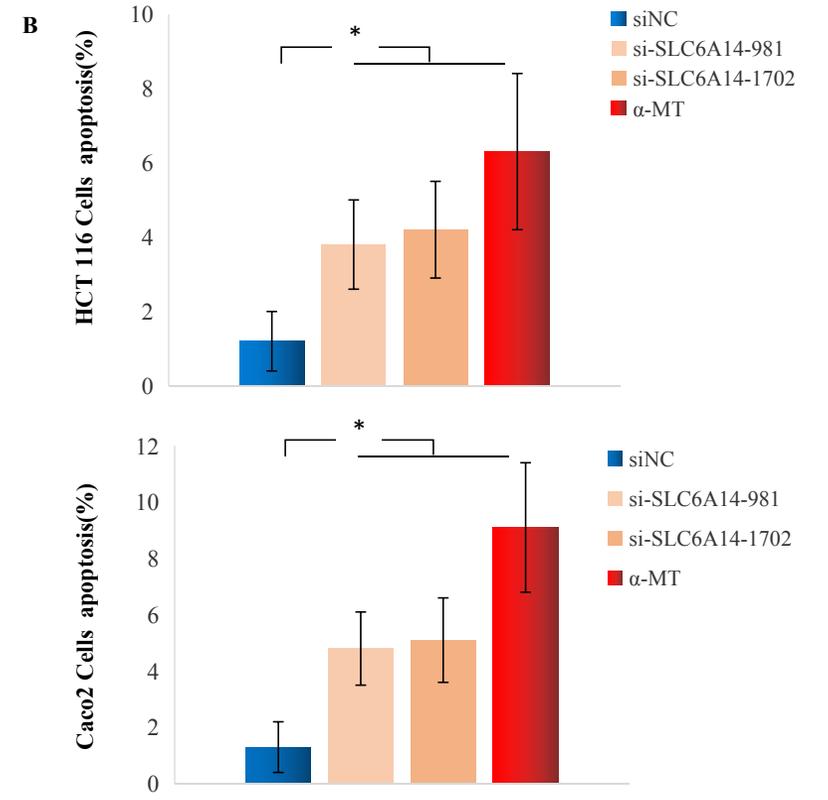
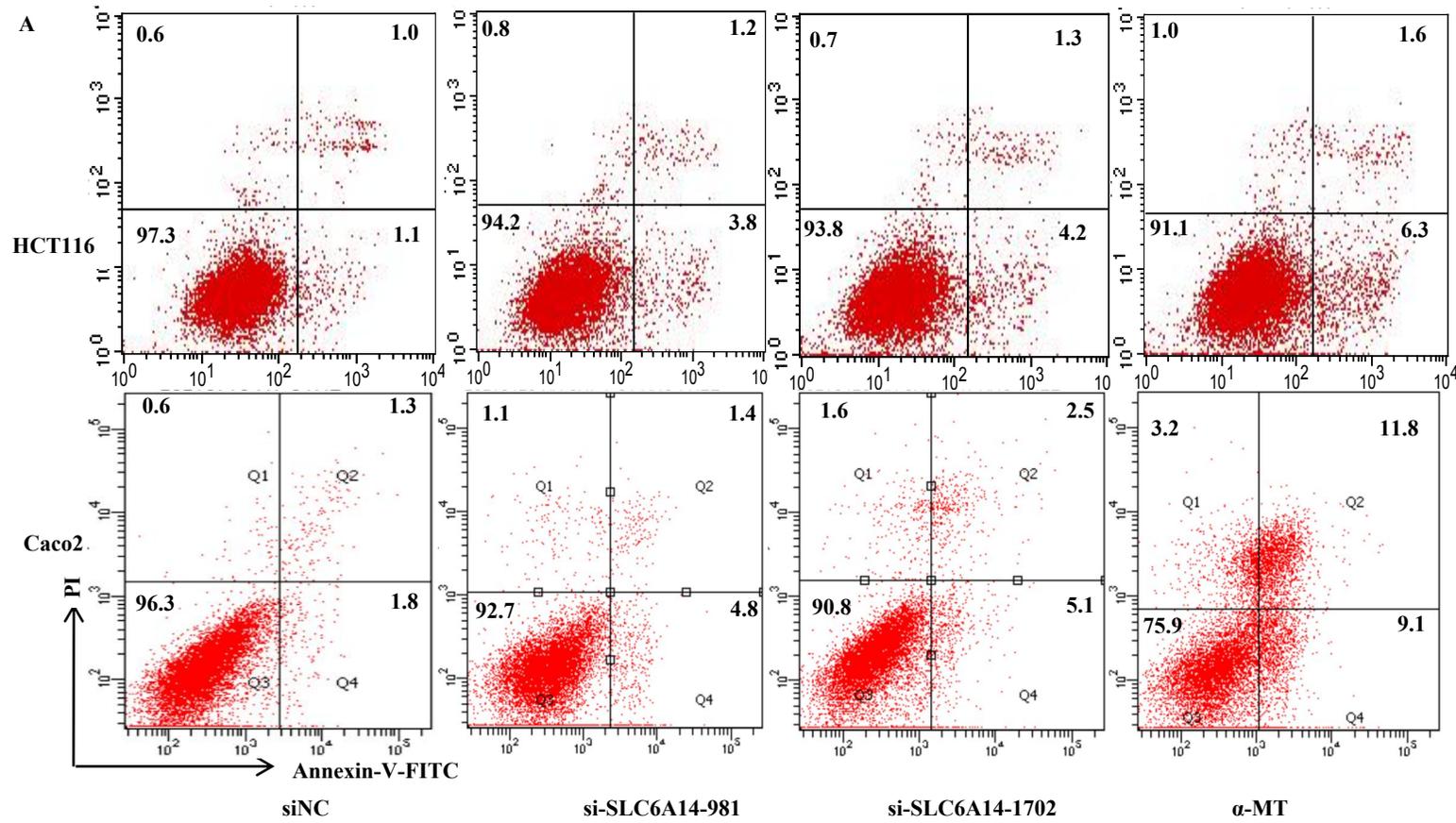
Supplementary Figure 1



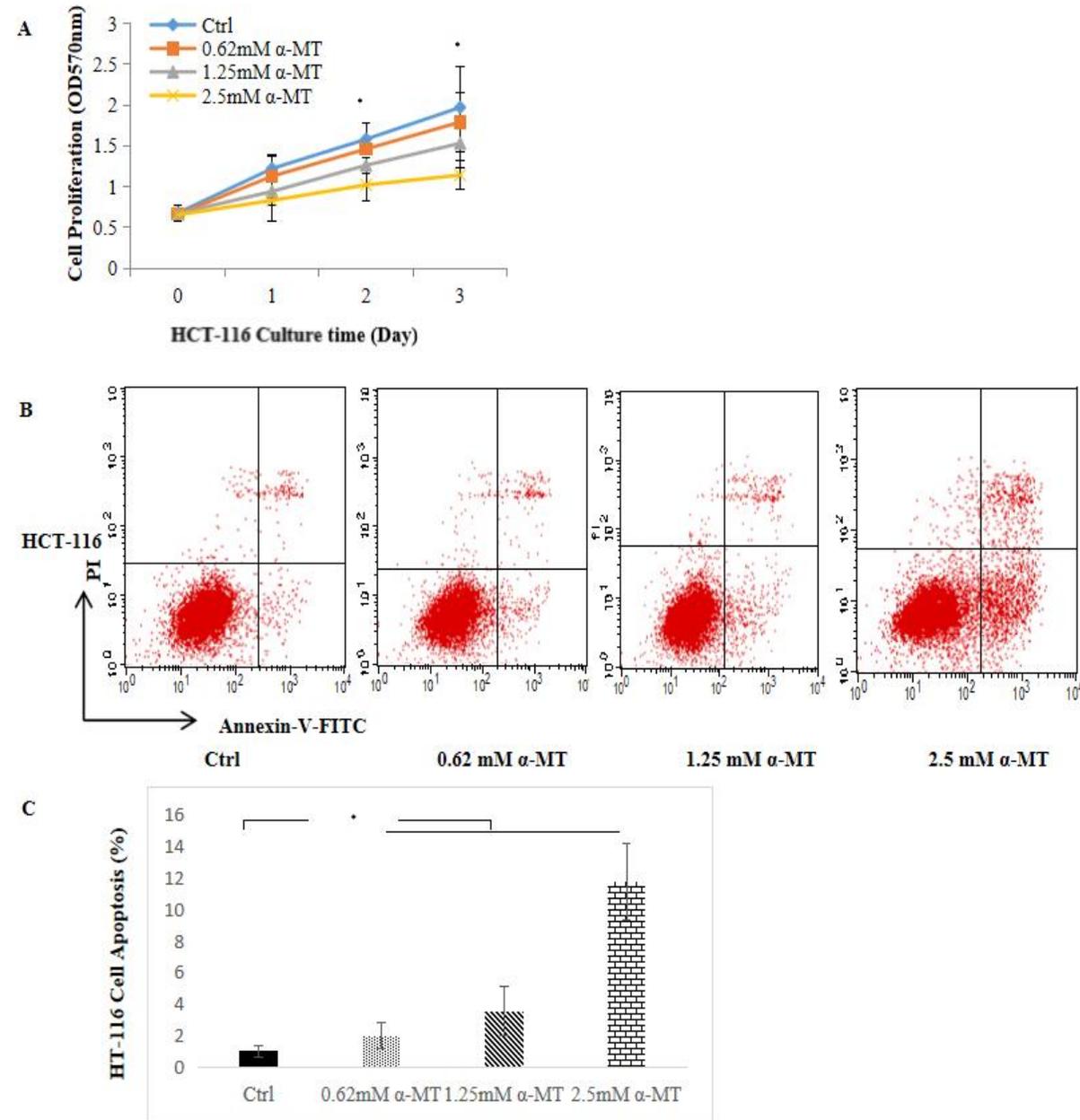
Supplementary Figure 2



Supplementary Figure 3



Supplementary Figure 4



Supplementary Figure 5

Ctrl



α -MT



SUPPLEMENTARY FIGURE LEGENDS

Supplementary Fig. 1 The publicly available TCGA database was used to analyze the mRNA expression levels of SLC3A1, SLC7A2, SLC7A3, SLC7A4 and SLC7A14 in colorectal cancer. * $P < 0.05$.

Supplementary Fig. 2 The effects of knockdown or blockade of SLC6A14 in SW480 cells. **a** The growth curve of the SW480 cells that were transfected with SLC6A14-siRNA or blockade of SLC6A14 with α -MT, as determined by MTT assay. **b** The cell apoptosis of the SW480 cells transfected with SLC6A14-siRNA or treated with α -MT cultured in FBS-free medium was stained with Annexin-V/PI and examined by flow cytometry. **c** The quantification of apoptotic cells identified as PI-negative and Annexin-V-positive staining. **d** Cell cycle analysis G₁/S transition of the SW480 cells transfected with SLC6A14-siRNA or treated with α -MT by flow cytometry. **e** Quantification of cell cycle analysis. The data are expressed as the mean \pm SD of three independent experiments.

Supplementary Fig. 3 Knockdown or blockade of SLC6A14 promotes apoptosis in the medium with 10% FBS. **a** The cell apoptosis of the HCT116 or Caco2 cells transfected with SLC6A14-siRNA or treated with α -MT cultured in 10% FBS medium was stained with Annexin-V/PI and examined by flow cytometry. **b** The quantification of apoptotic cells

identified as PI-negative and Annexin-V-positive staining. The data are expressed as the mean \pm SD of three independent experiments. * $P < 0.05$.

Supplementary Fig. 4 The effects of different concentrations of α -MT on cell proliferation and apoptosis. **a** The growth curve of the HCT116 cells treated with 0mM, 0.62mM, 1.25mM and 2.5mM α -MT, as determined by MTT assay. **b** The cell apoptosis of the HCT116 cells treated with 0mM, 0.62mM, 1.25mM and 2.5mM α -MT was stained with Annexin-V/PI and examined by flow cytometry. **c** The quantification of apoptotic cells identified as PI-negative and Annexin-V-positive staining.

Supplementary Fig. 5 Two pictures of another 6 mice.

WB raw blots
Figure 1

Figure 1C-SLC6A14

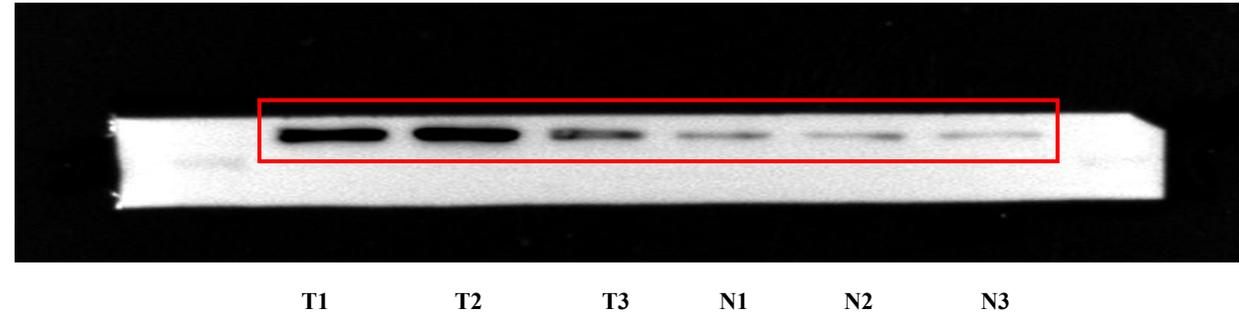


Figure 1E-SLC6A14

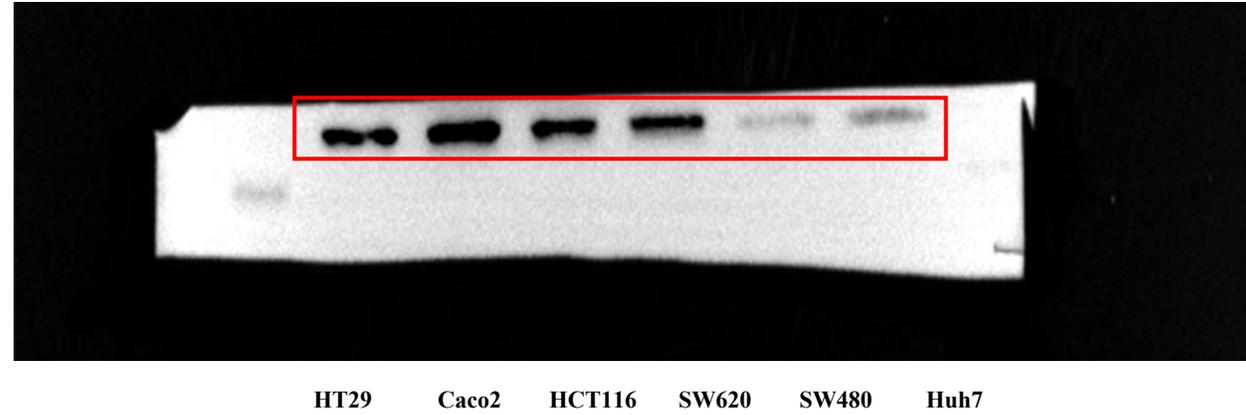
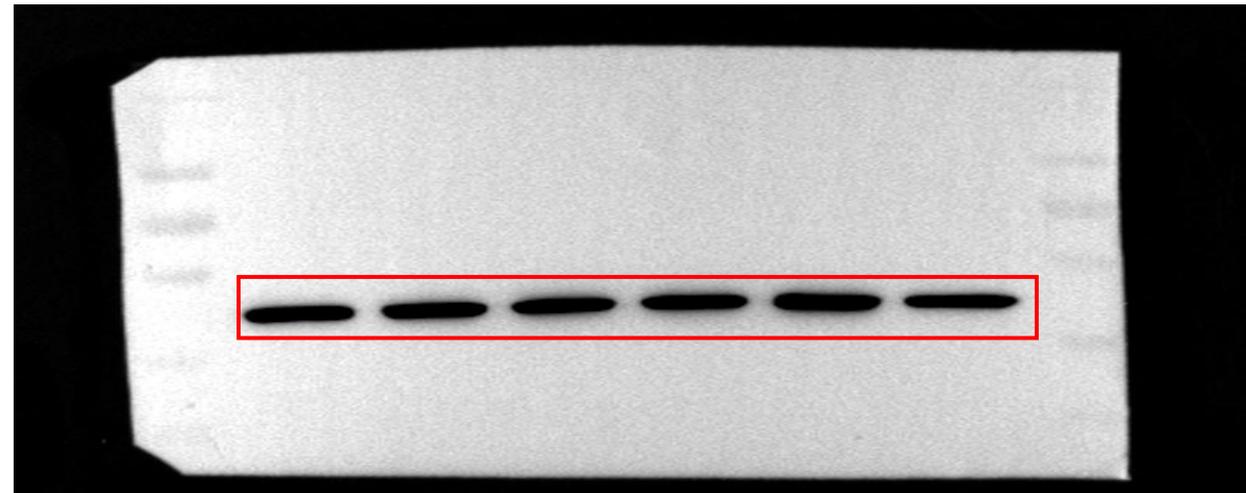


Figure 1E- β -actin



WB raw blots
Figure 3

Figure 3A-SLC6A14

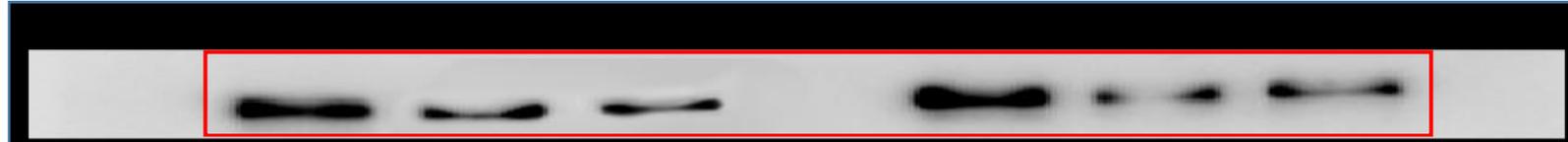
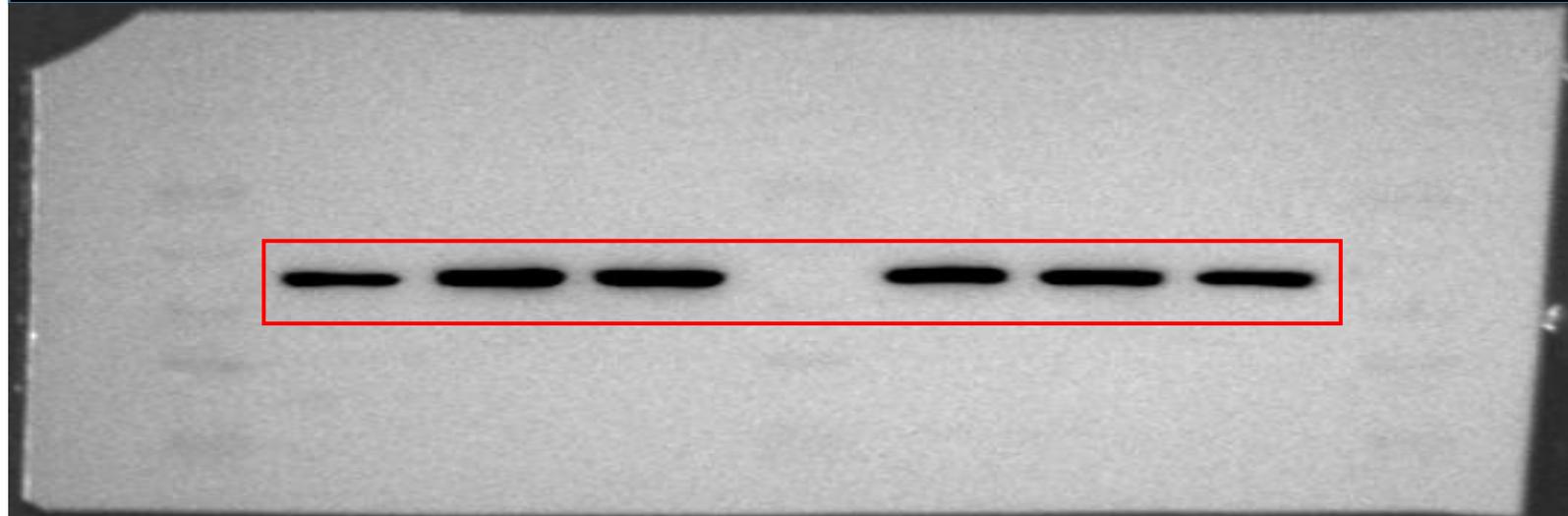


Figure 3A-actin



siNC si-SLC6A14-981 si-SLC6A14-1702

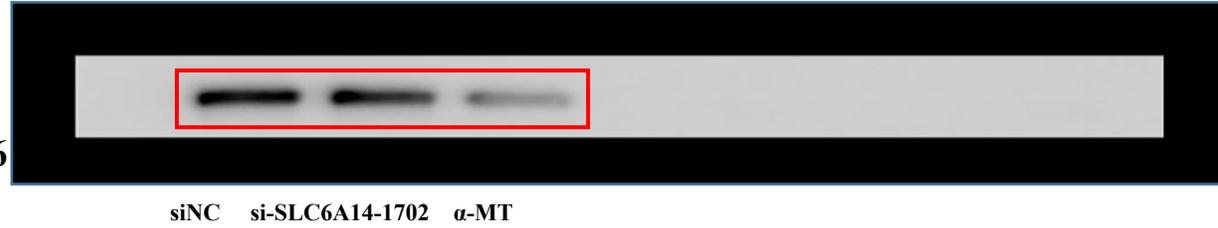
HCT116

siNC si-SLC6A14-981 si-SLC6A14-1702

Caco2

WB raw blots
Figure 6A-HCT116-mTOR

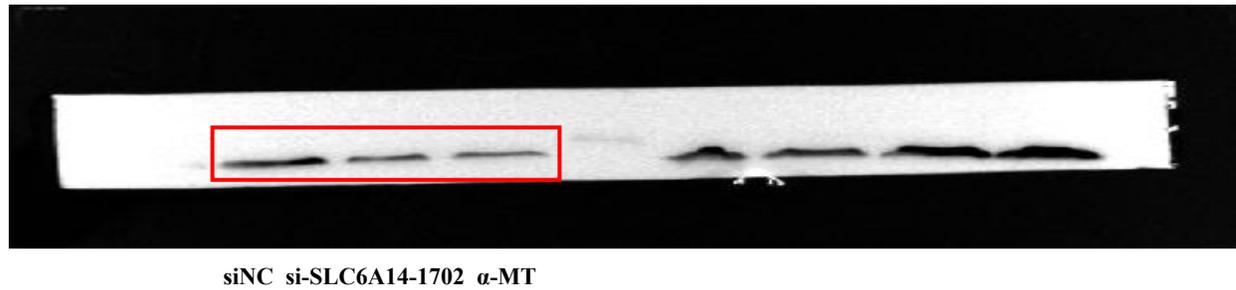
**Figure 6 A-
mTOR-HCT116**



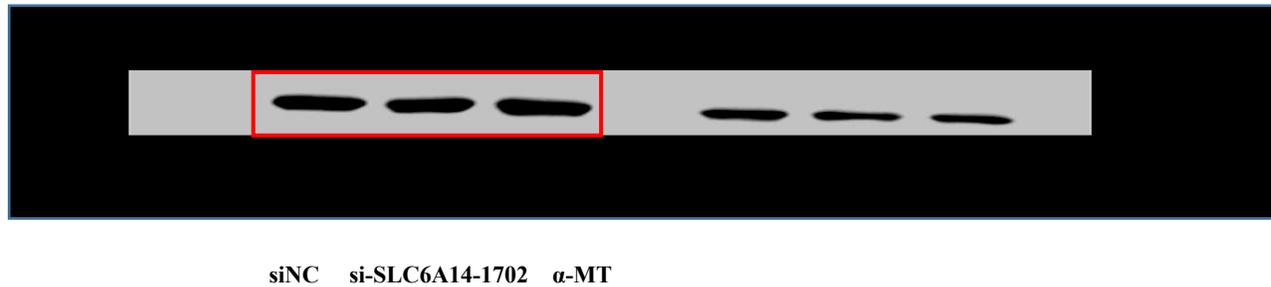
**Figure 6A-P-
mTOR-HCT116**



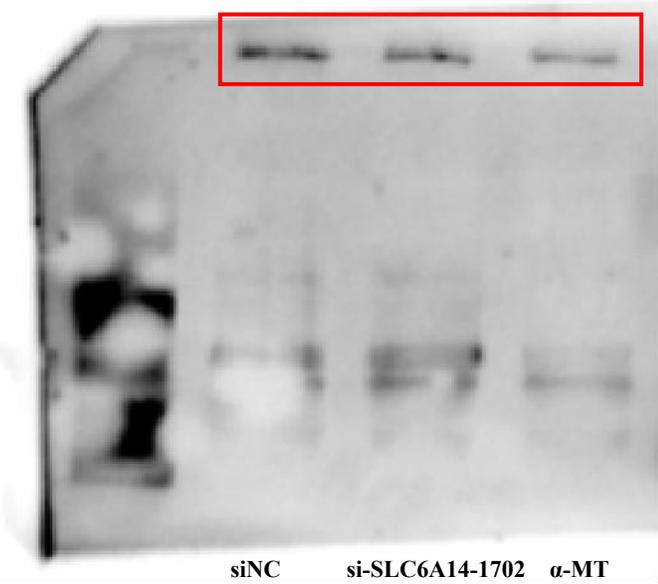
**Figure 6A-
GbL-HCT116**



**Figure 6A-
actin-HCT116**



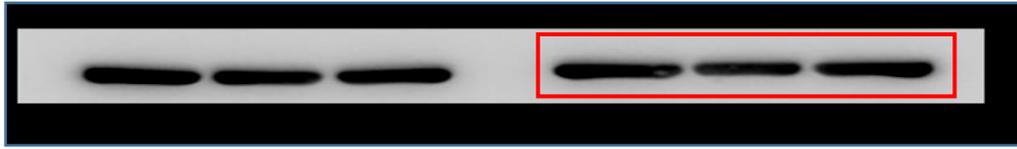
**Figure 6A-
Raptor-HCT116**



WB raw blots

Figure 6A-Caco2-mTOR

Figure 6A-actin-Caco2



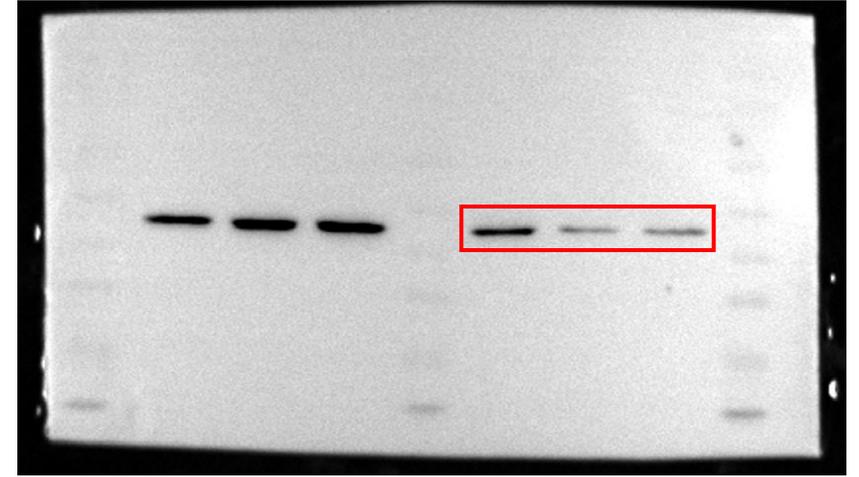
siNC si-SLC6A14-1702 α -MT

Figure 6A-P-mTOR-Caco2



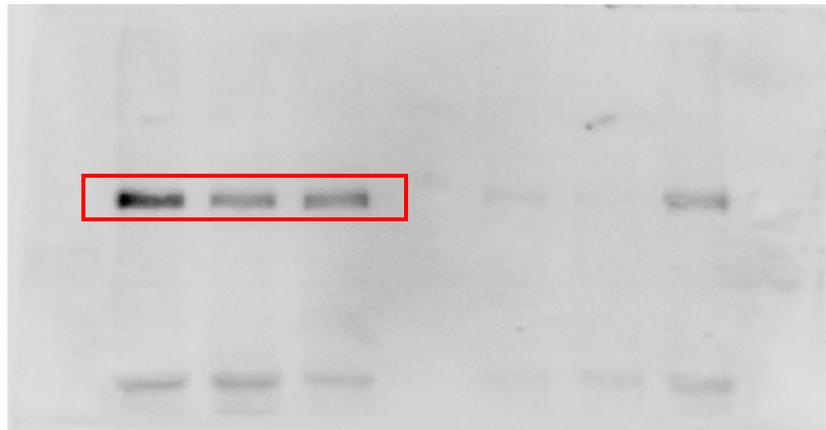
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Figure 6A-GbL-Caco2



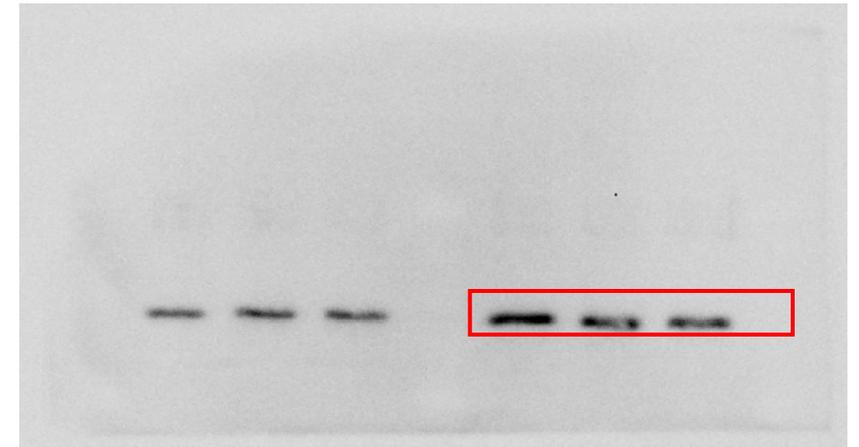
siNC si-SLC6A14-1702 α -MT

Figure 6A-mTOR-Caco2



siNC si-SLC6A14-1702 α -MT

Figure 6A-P-Raptor-Caco2



siNC si-SLC6A14-1702 α -MT

WB raw blots
Figure 6A-HCT116-MMPs

Figure 6A-MMP2-HCT116



Figure 6A-MMP9-HCT116

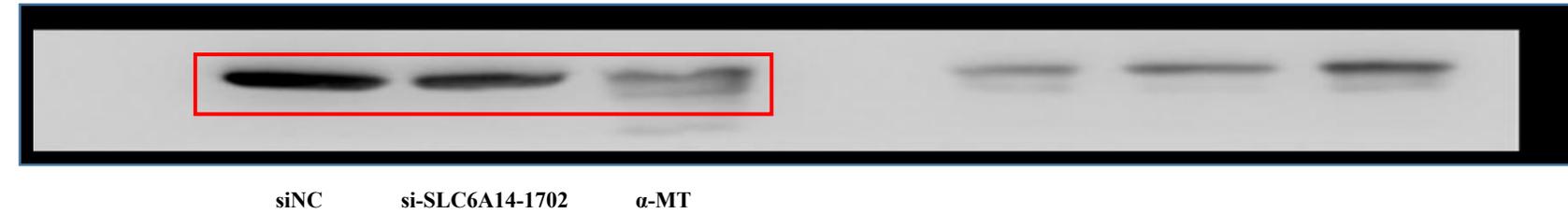


Figure 6A-MT1-HCT116

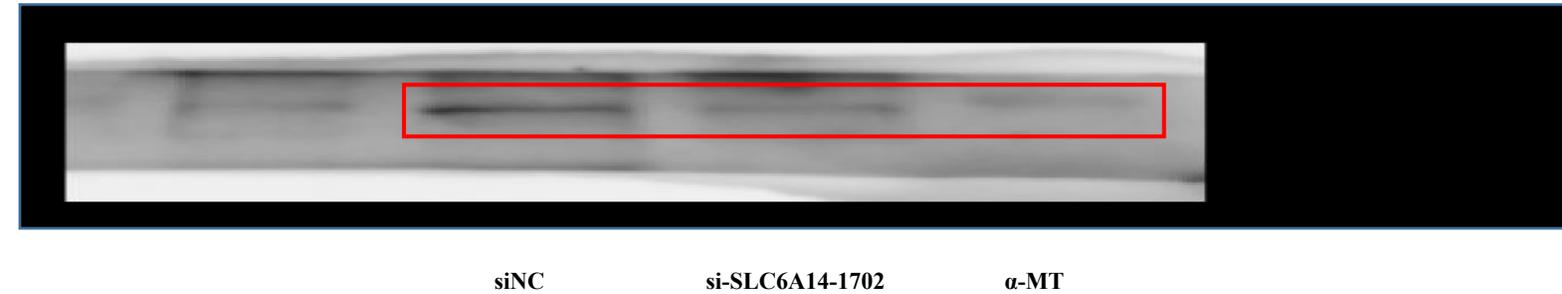
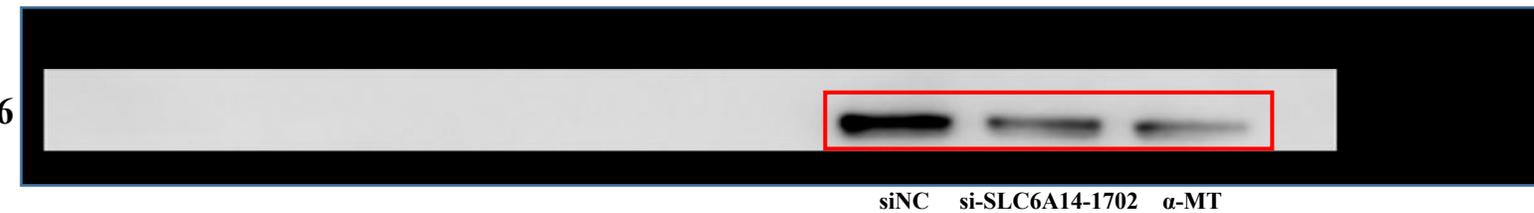


Figure 6A-SLC6A14-HCT116



WB raw blots
Figure 6A-Caco2-MMPs

Figure 6A-MMP2-Caco2



Figure 6A-MMP9-Caco2

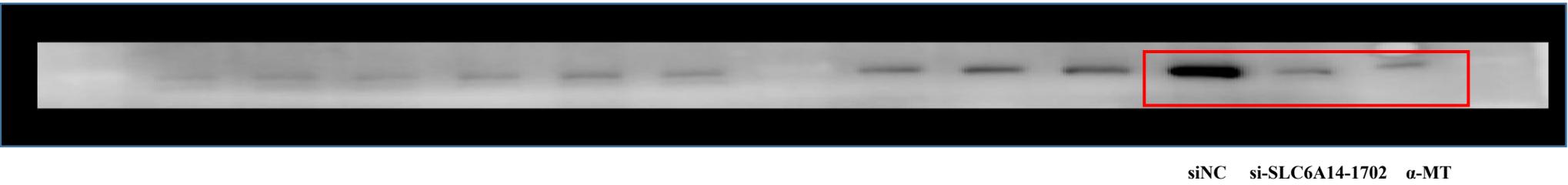


Figure 6A-MT1-Caco2

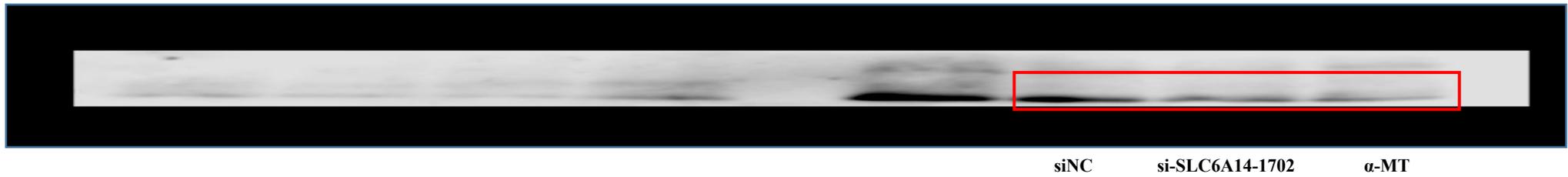
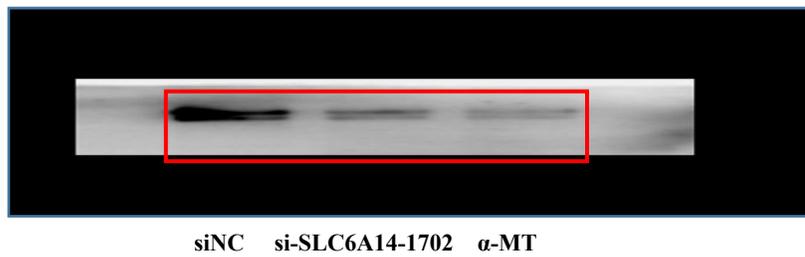


Figure 6A-SLC6A14-Caco2



WB raw blots
Figure 6D-HCT116

Figure 6D-P-p70S6-HCT116



Figure 6D-P-S6-HCT116

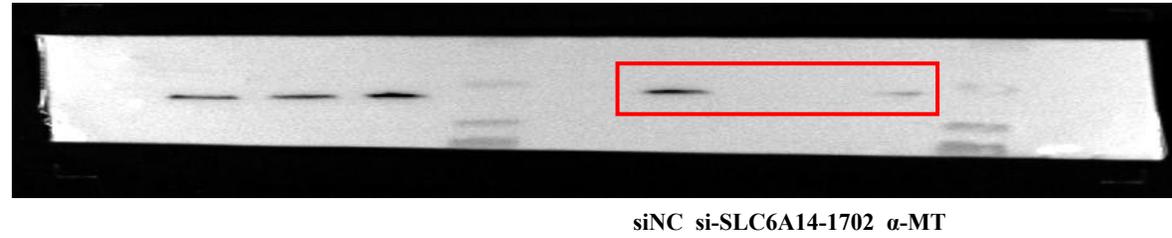


Figure 6A-P-4EBP1-HCT116

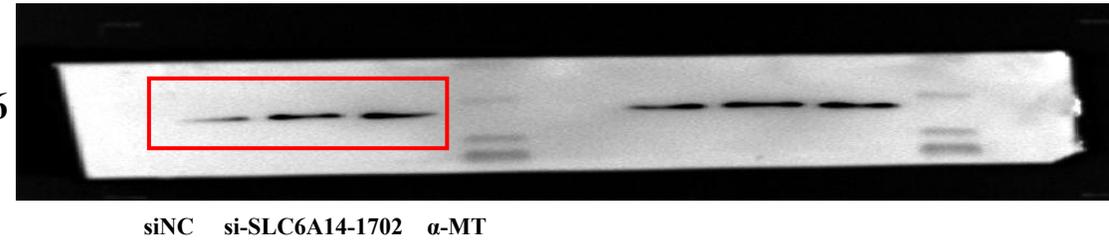
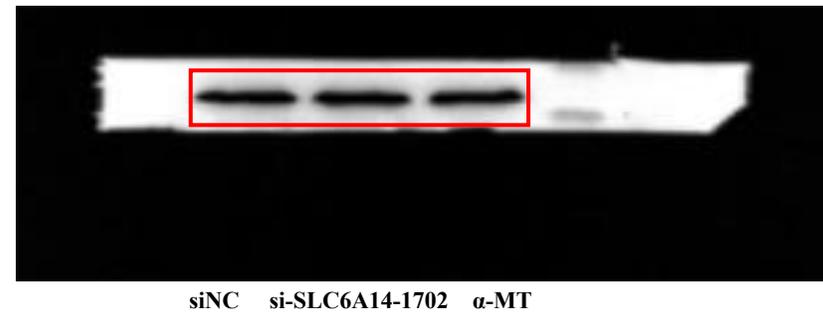


Figure 6D-actin-HCT116



WB raw blots
Figure 6D-Caco2

Figure 6D-P-p70S6-Caco2



Figure 6D-P-S6-Caco2

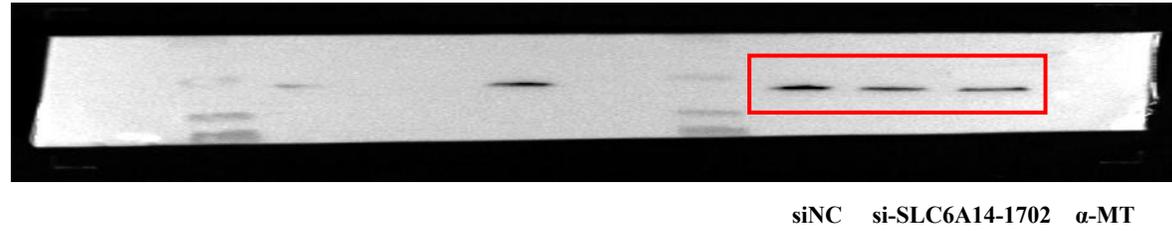


Figure 6D-P-4EBP1-Caco2

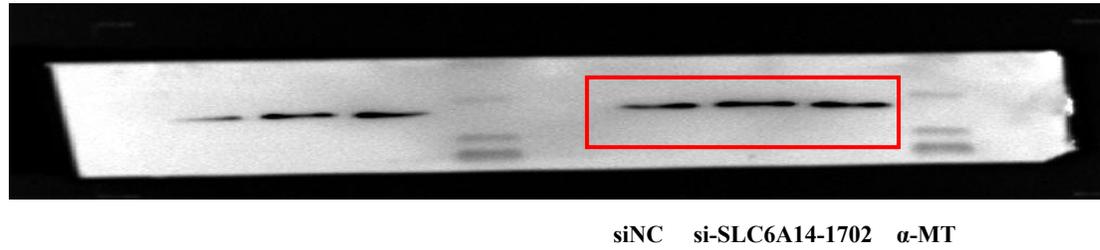
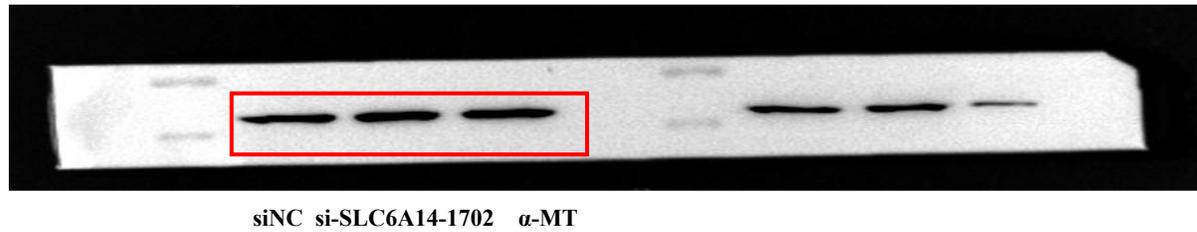
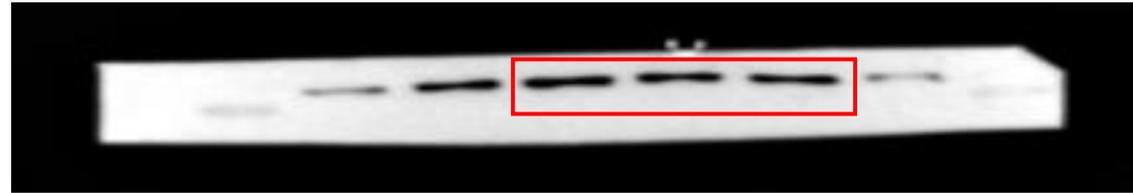


Figure 6D-actin-Caco2



WB raw blots
Figure 6F-HCT116

Figure 6F-Akt-HCT116



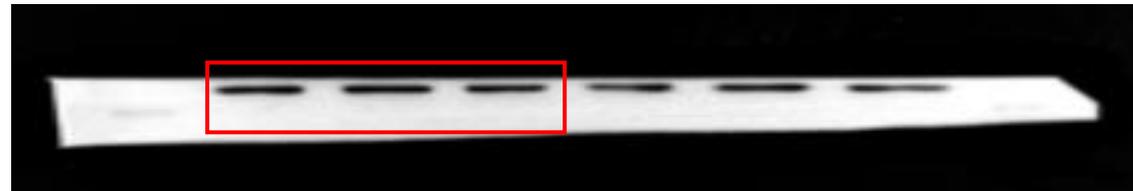
siNC si-SLC6A14-1702 α -MT

Figure 6F-P-Akt-HCT116



siNC si-SLC6A14-1702 α -MT

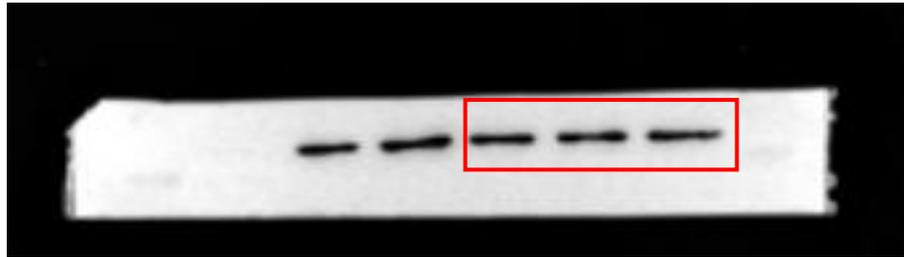
Figure 6F-actin-HCT116



siNC si-SLC6A14-1702 α -MT

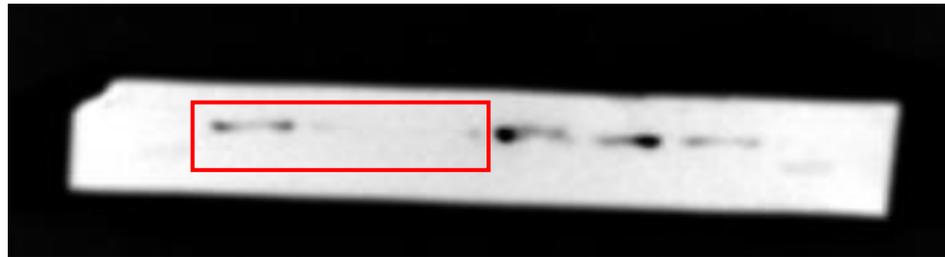
WB raw blots
Figure 6F-Caco2

Figure 6F-Akt-Caco2



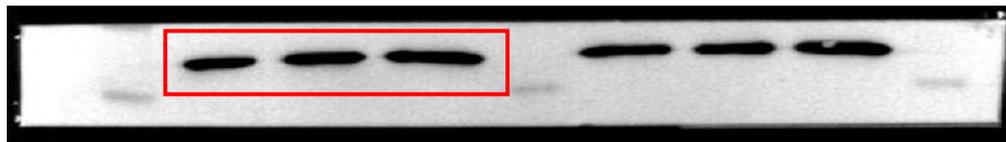
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Figure 6F-P-Akt-Caco2



siNC si-SLC6A14-1702 α -MT

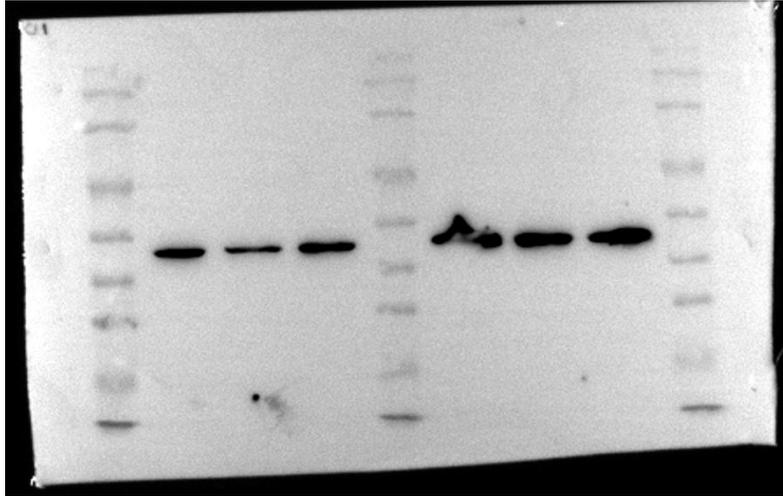
Figure 6F-actin-Caco2



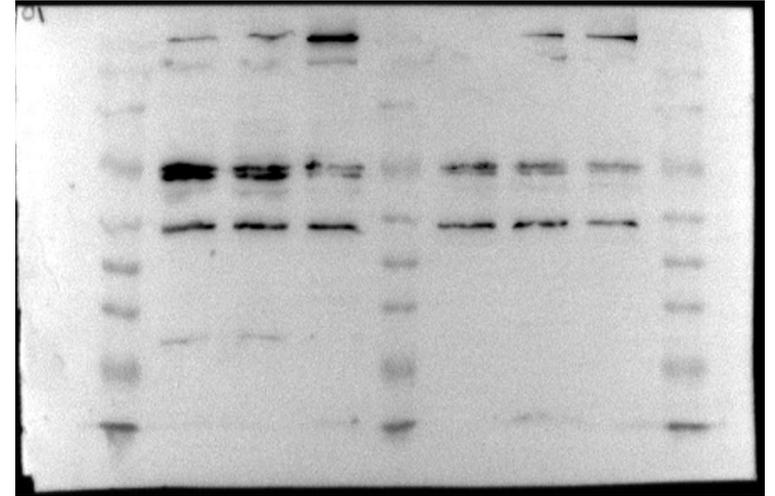
siNC si-SLC6A14-1702 α -MT

**WB raw blots
multiple exposure images**

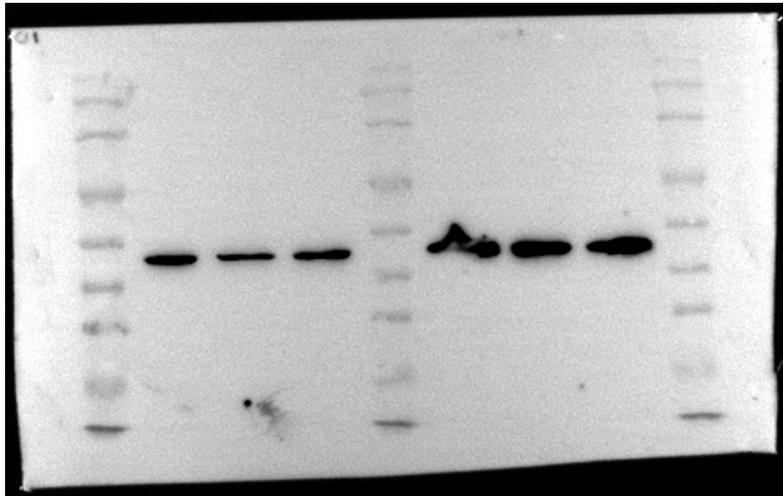
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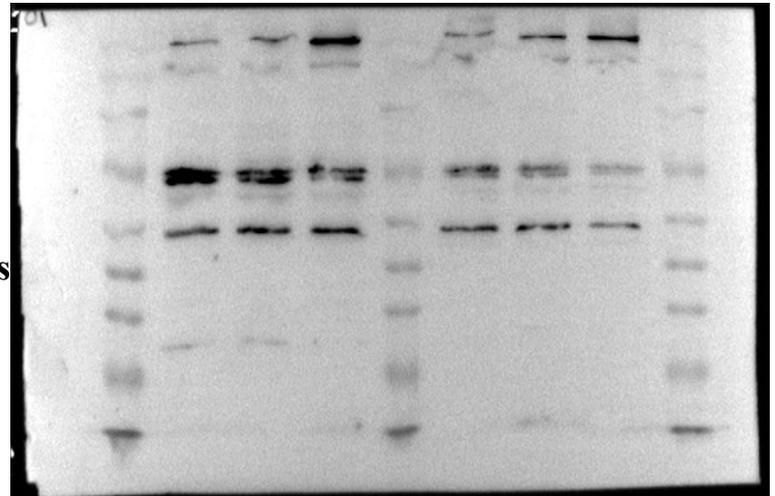
exposure time = 60s



exposure time = 60s



exposure time = 120s



β -actin

SLC6A14