

Supplementary Information

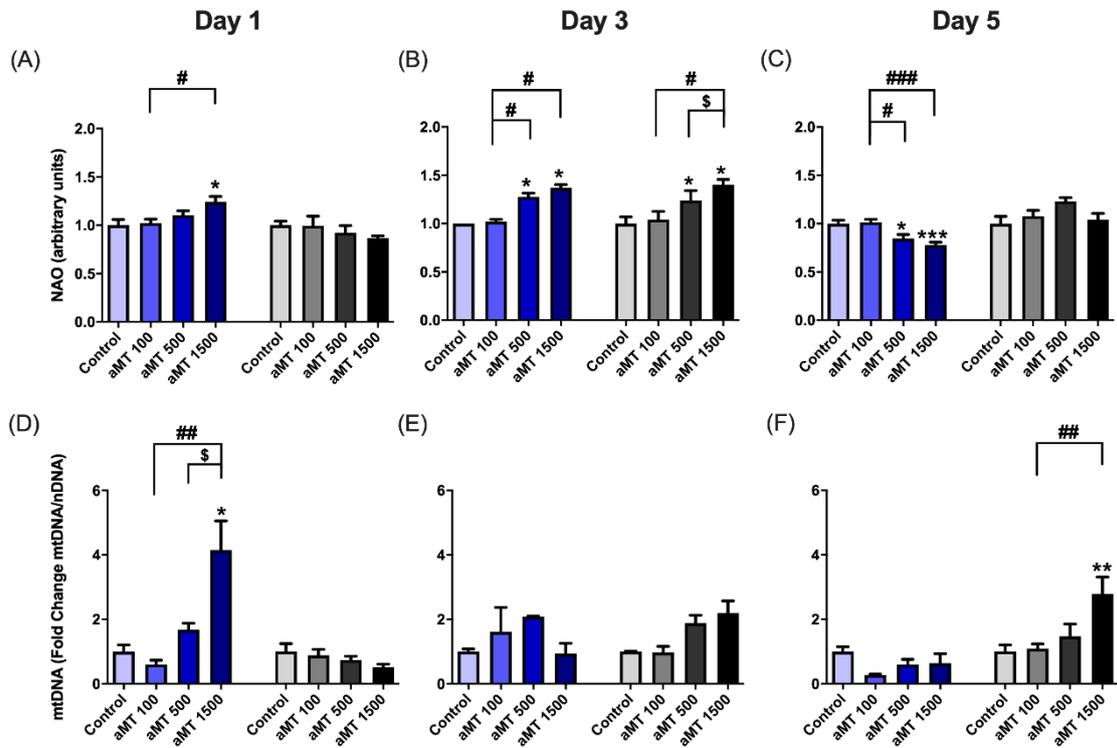


Figure S1. Melatonin-induced changes in mitochondrial morphology. Alterations in mitochondrial mass (NAO) (A–C) and mtDNA (D–F) in Cal-27 and SCC-9 cells. $n = 6$ per group. Data are presented as mean \pm SEM. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ vs. control; # $p < 0.05$, ## $p < 0.01$, ### $p < .001$ vs. aMT 100 μ M group; \$ $p < 0.05$.

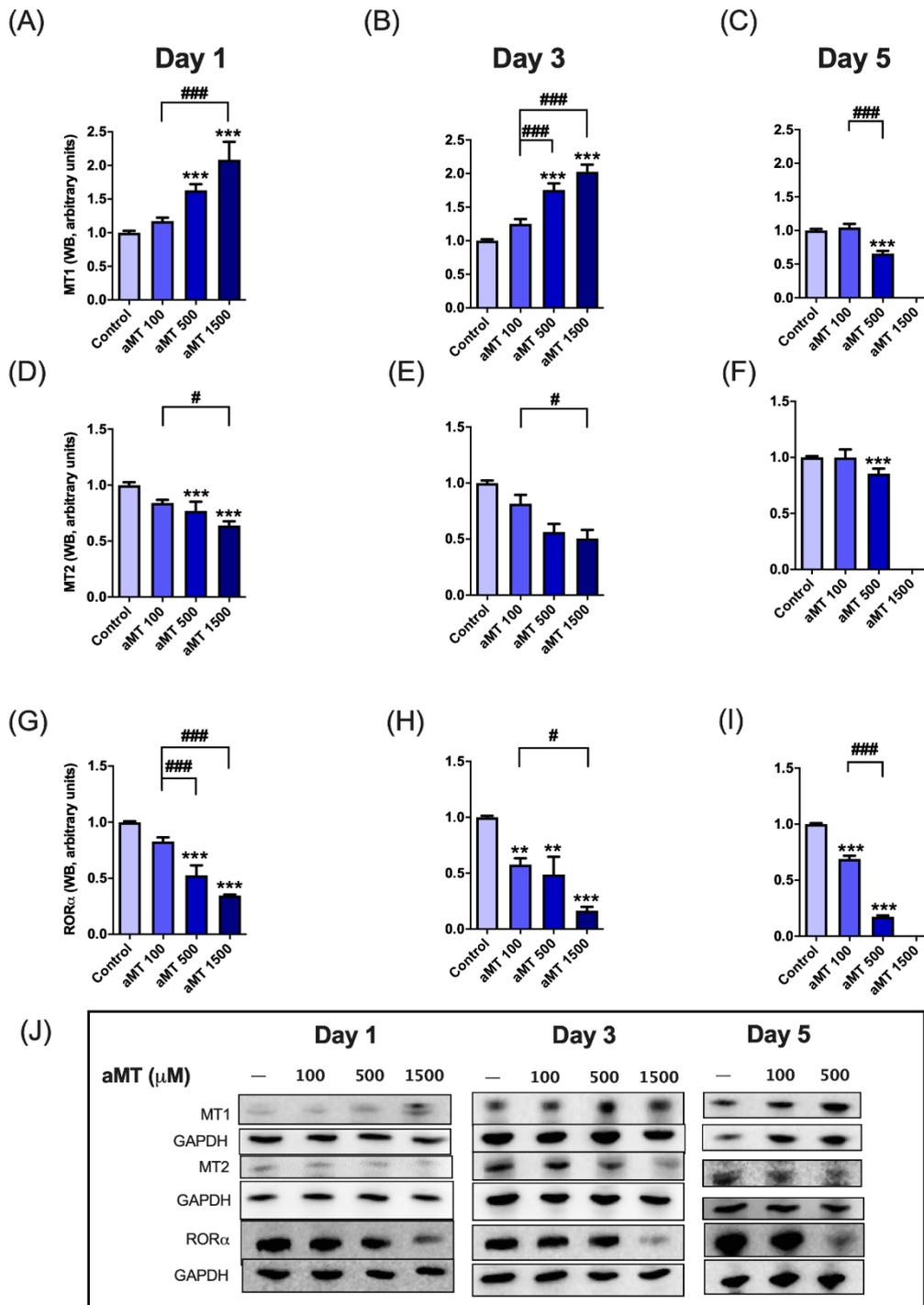


Figure S2. Modulation of melatonin receptor expression by melatonin in Cal-27 cells. Western Blot analysis of MT1 (A–C, J), MT2 (D–F, J) and RORα (G–I). n = 6 per group. Data are presented as mean ± SEM. ***p* < 0.01, ****p* < 0.001 vs. control; #*p* < 0.05, ###*p* < 0.001 vs. aMT 100 μM group.

Full western data

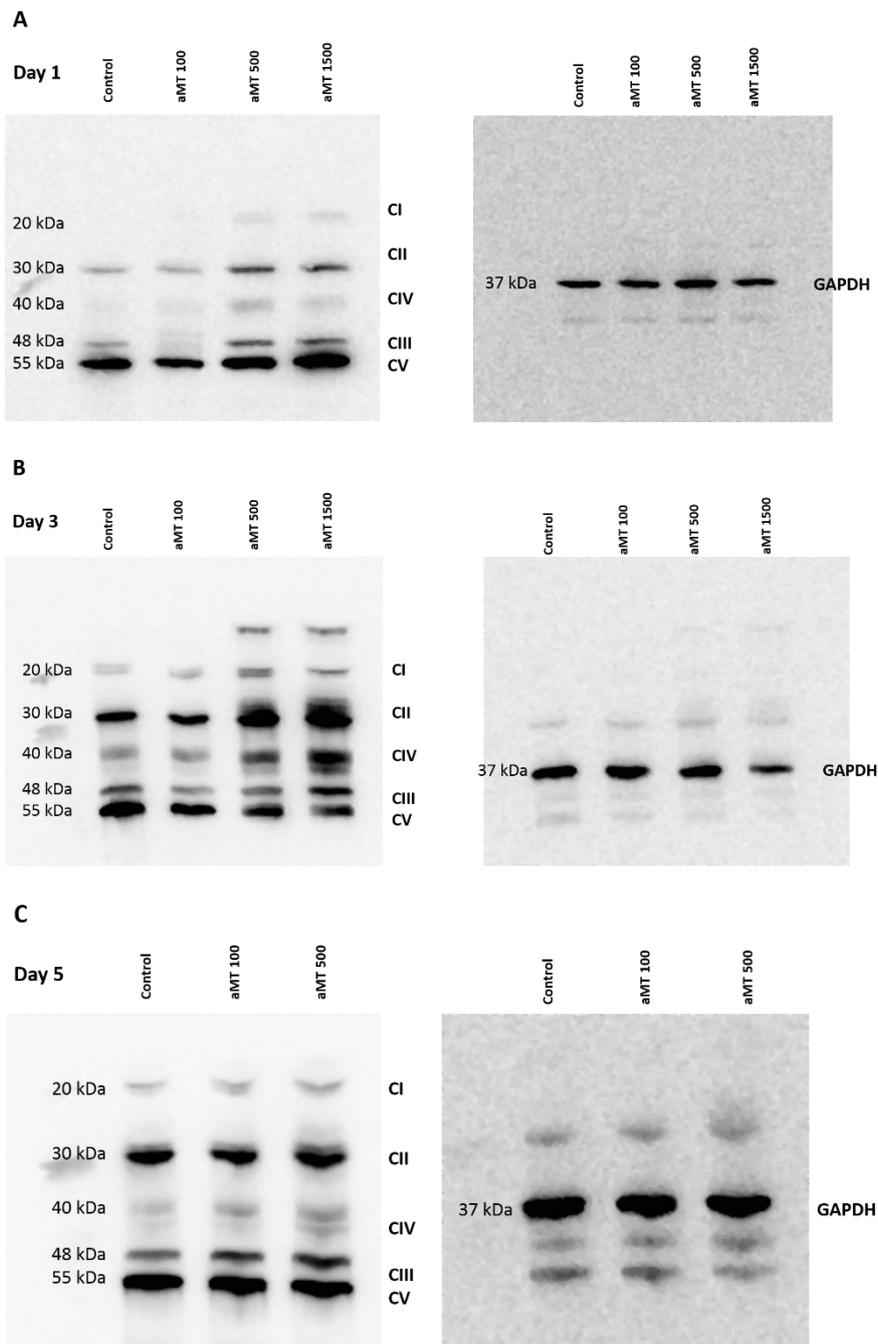


Figure S3. Full scanned Western blots shown in Figure 3. Protein content of OXPHOS proteins (Complex I-V) in figure 3 A, B (A); 3 C, D (B) and 3 E, F (C). Experiments were performed with Cal-27 cells in Control, aMT 100, aMT 500 and aMT 1500 groups.

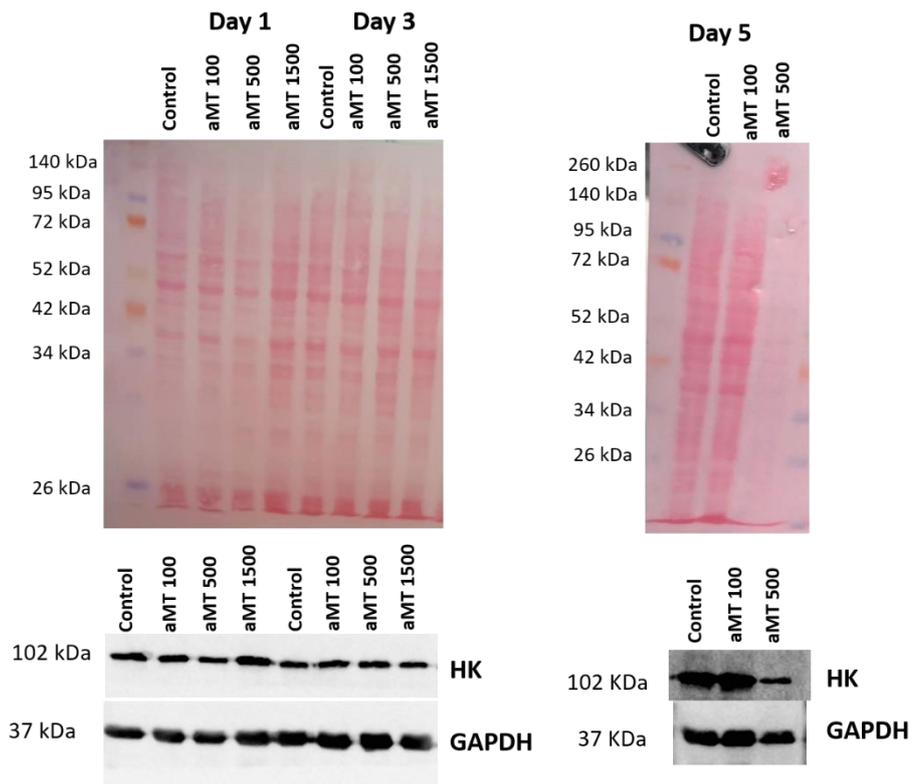


Figure S4. Full scanned Western blots shown in Figure 5 J–L. Protein content of hexokinase II in figure 5. Experiments were performed with Cal-27 cells in Control, aMT 100, aMT 500 and aMT 1500 groups.

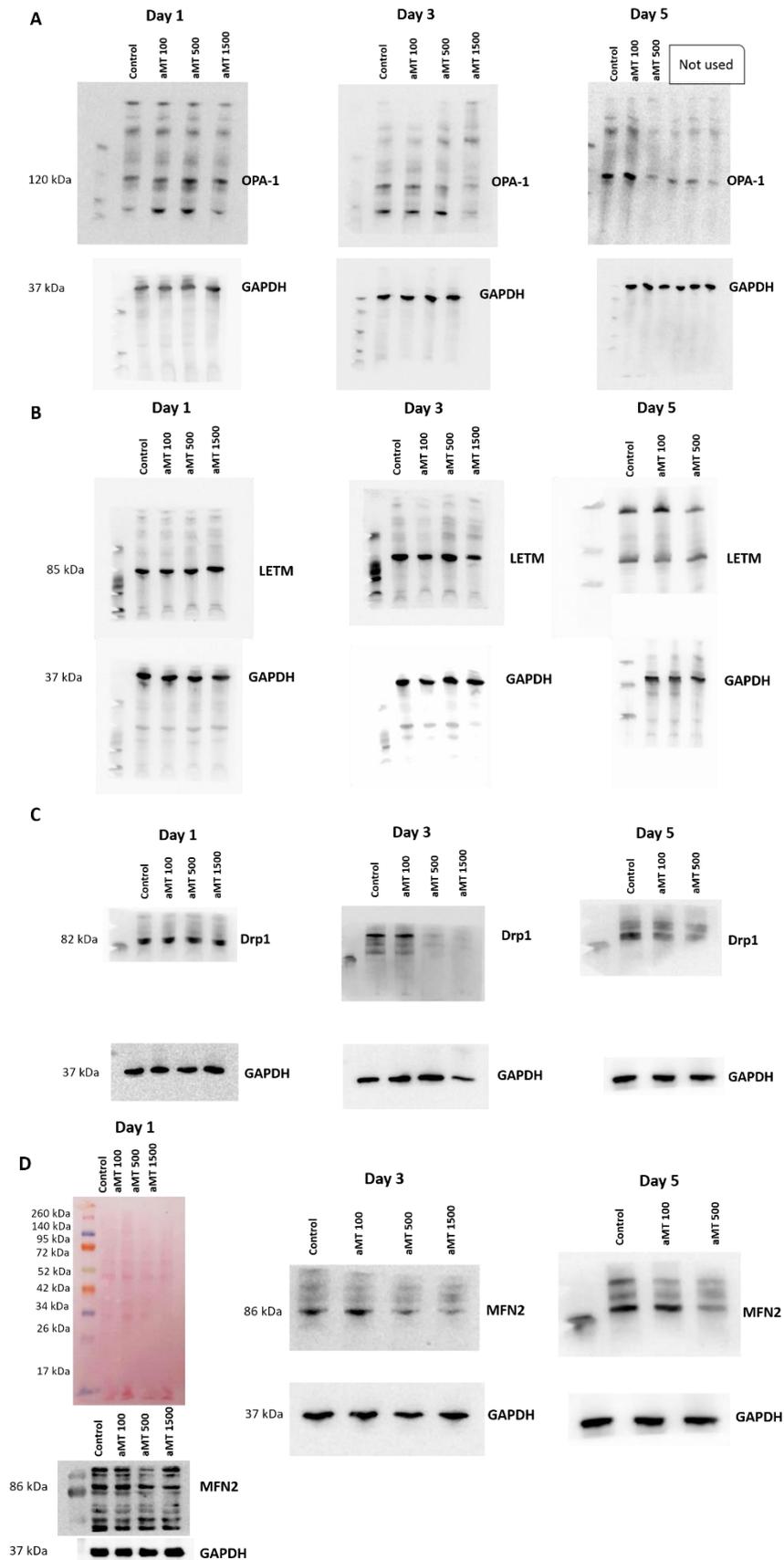


Figure S5. Full scanned Western blots shown in Figure 7. Protein content of OPA-1, LETM, MFN2 and Drp1 in Figure 7 A-C, M (A); D-F, M (B); G-I, M (C) and J-M (D). Experiments were performed with Cal-27 cells in Control, aMT 100, aMT 500 and aMT 1500 groups.

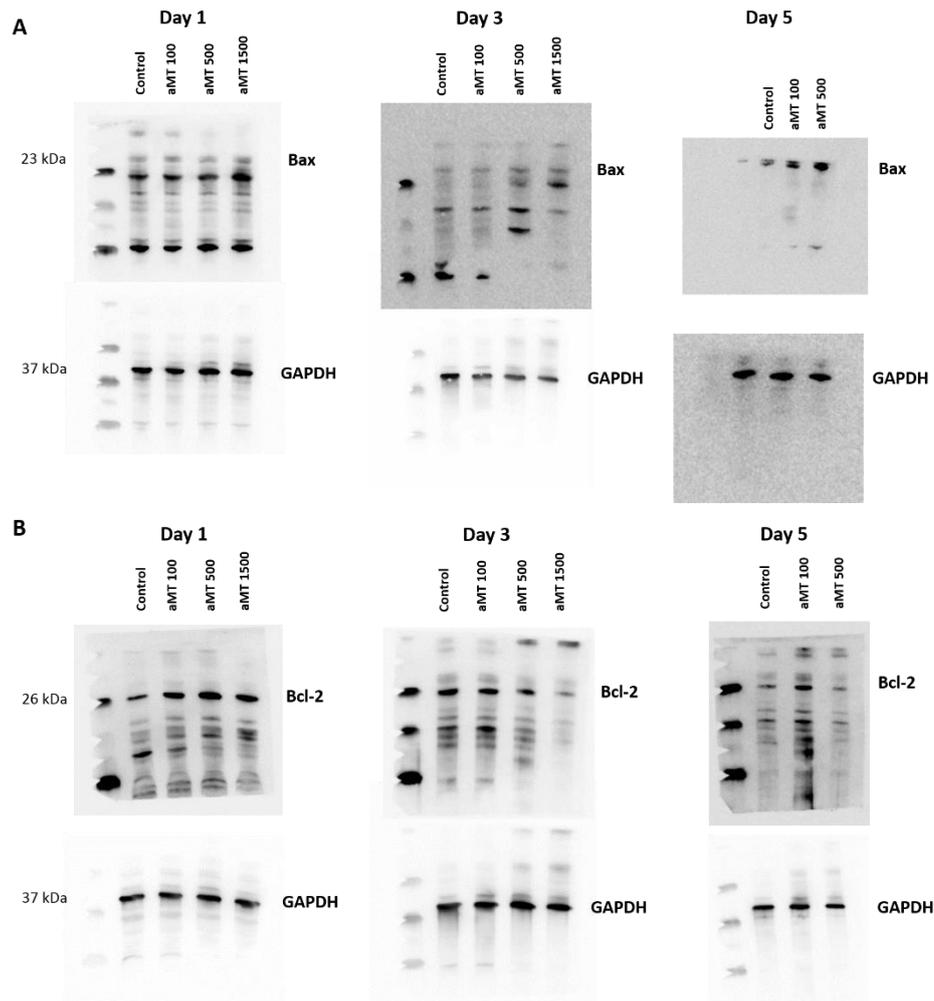


Figure S6. Full scanned Western blots shown in Figure 8 A–J. Protein content of Bax and Bcl-2 in Figure 8 A–C, J (A); D–F, J (B). Experiments were performed with Cal-27 cells in Control, aMT 100, aMT 500 and aMT 1500 groups.

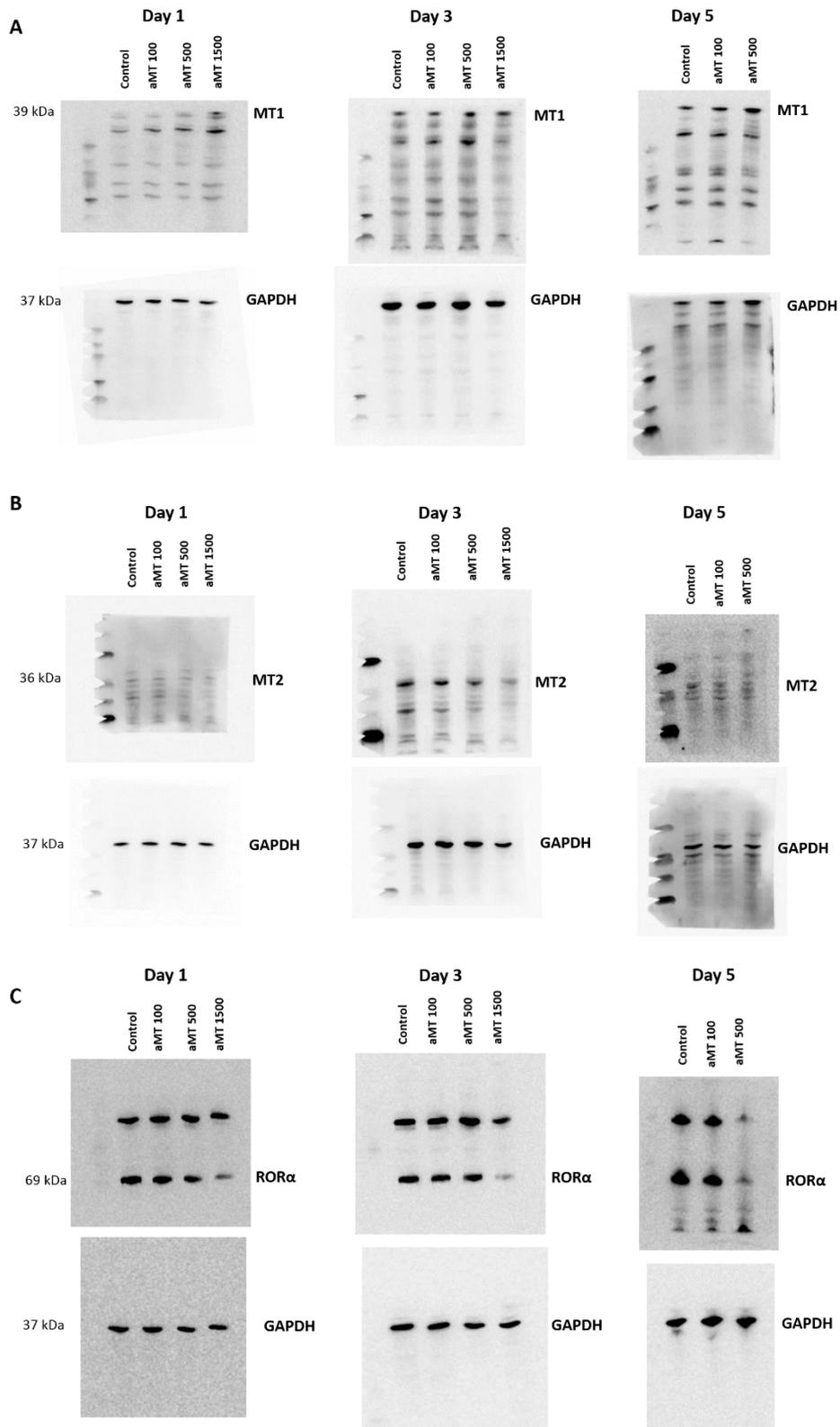


Figure S8. Full scanned Western blots shown in Figure S2. Protein content MT1, MT2 and ROR α in Figure S2 A–C, J (A); D–F, J (B); K–M, T (C). Experiments were performed with Cal-27 cells in Control, aMT 100, aMT 500 and aMT 1500 groups.