Suppl. Table 1: Antibodies

Antibody	Seller	Product #	Dilution	Host	Type	Protocol	Use
β-actin	Sigma	A5060	1:1000	rabbit	pab	1 h, RT	WB
Cytochrome oxidase COX-IV	Abcam	ab33985	1:100	mouse	mab	1 d, 4°C	IF
GAPDH	Ambion	AM4300	1:1000	mouse	mab	1 d, 4°C	WB
Hsc70/HSPA8	Abcam	ab19136	1:200	rat	mab	1 d, 4°C	WB
Ki67	Abcam	ab15580	1:500	rabbit	pab	1 d, 4°C	IF
LC3b	Cell Signaling	2775S	1:300 1:200	rabbit	pab	3 d, 4°C	IF WB
Nucleoredoxin	Sigma	HPA023566	1:200	rabbit	pab	1 d, 4°C	IF, WB
SQSTM1/p62	Abcam	ab155686	1:200	rabbit	pab	3 d, 4°C	WB
Ubiquitin C (UBC)	Cell Signaling	3936	1:200	mouse	mab	3 d, 4°C	WB
UBE2D2	Santa Cruz	sc166278	1:200	mouse	mab	3 d, 4°C	WB
Vimentin	Abcam	ab92547	1:100	rabbit	mab	1 d, 4°C	IF
Drp1	Cell Signal	D6C7 #8570	1:200	rabbit	mab	1 d, 4°C	IF
Wheat germ agglutinin, AF488 conjugate	Invitrogen	W11261	5 µg/ml			10 min, 37°C	IF

WB, Western Blot; IF, immunofluorescence

Suppl. Fig. 1

scrNXN

001scrNXN 01.fcs

%G1 : 16.6
%S : 17.7
%G2 : 22.5
G1 Mean : 45426
G2 Mean : 90547
G1 CV : 8.82
G2 CV : 6.76
% < G1 : 1.91
% > G2 : 41.3

shNXN

010shNXN _01.fcs

%G1 : 37.9
%S : 17.0
%G2 : 30.3
G1 Mean : 74220
G2 Mean : 145799
G1 CV : 8.16
G2 CV : 7.25
% < G1 : 2.51
% > G2 : 13.8

scrNXN – H_2O_2

005scrNXN . H2O2 02.fcs

%G1 : 25.8
%S : 19.5
%G2 : 17.7
G1 Mean : 47128
G2 Mean : 92867
G1 CV : 10.8
G2 CV : 9.66
% < G1 : 9.46
% > G2 : 27.8

shNXN – H_2O_2

013shNXN . H2O2_01.fcs

%G1 : 29.5
%S : 23.1
%G2 : 22.5
G1 Mean : 75131
G2 Mean : 146111
G1 CV : 10.4
G2 CV : 6.99
**% < G1** : 13.1
% > G2 : 12.2

Suppl. Fig. 1: Cell cycle analysis of naive and H_2O_2-treated shNXN SH-SY5Y neuroblastoma cells versus scrambled control cells (scrNXN). The cell cycle distribution was fitted to an univariate algorithm similar to a Watson Pragmatic algorithm with FlowJo V10.6. The images show exemplary results for each group.

Suppl. Fig. 2: Bafilomycin 1 µM (blots of Fig. 4)
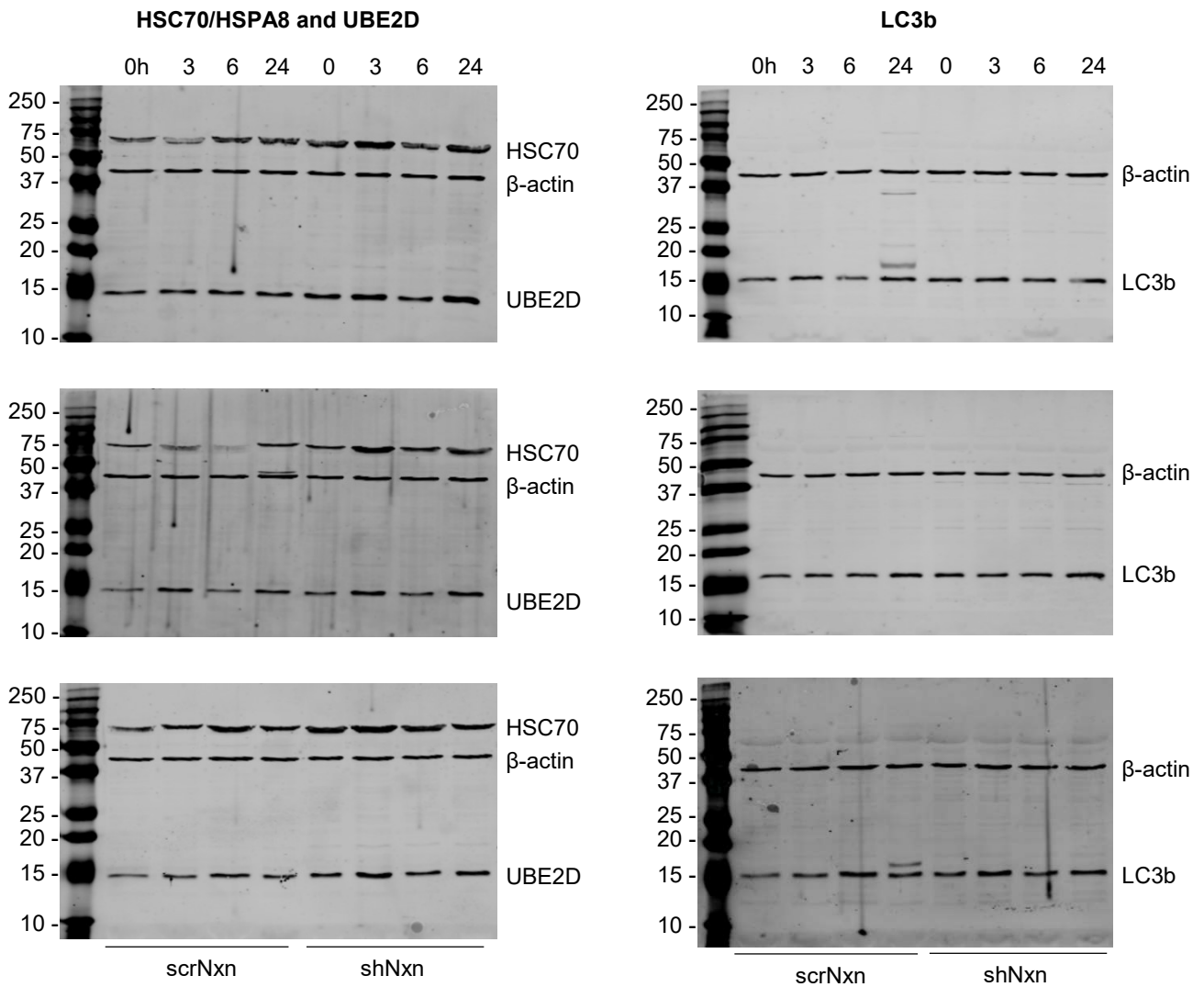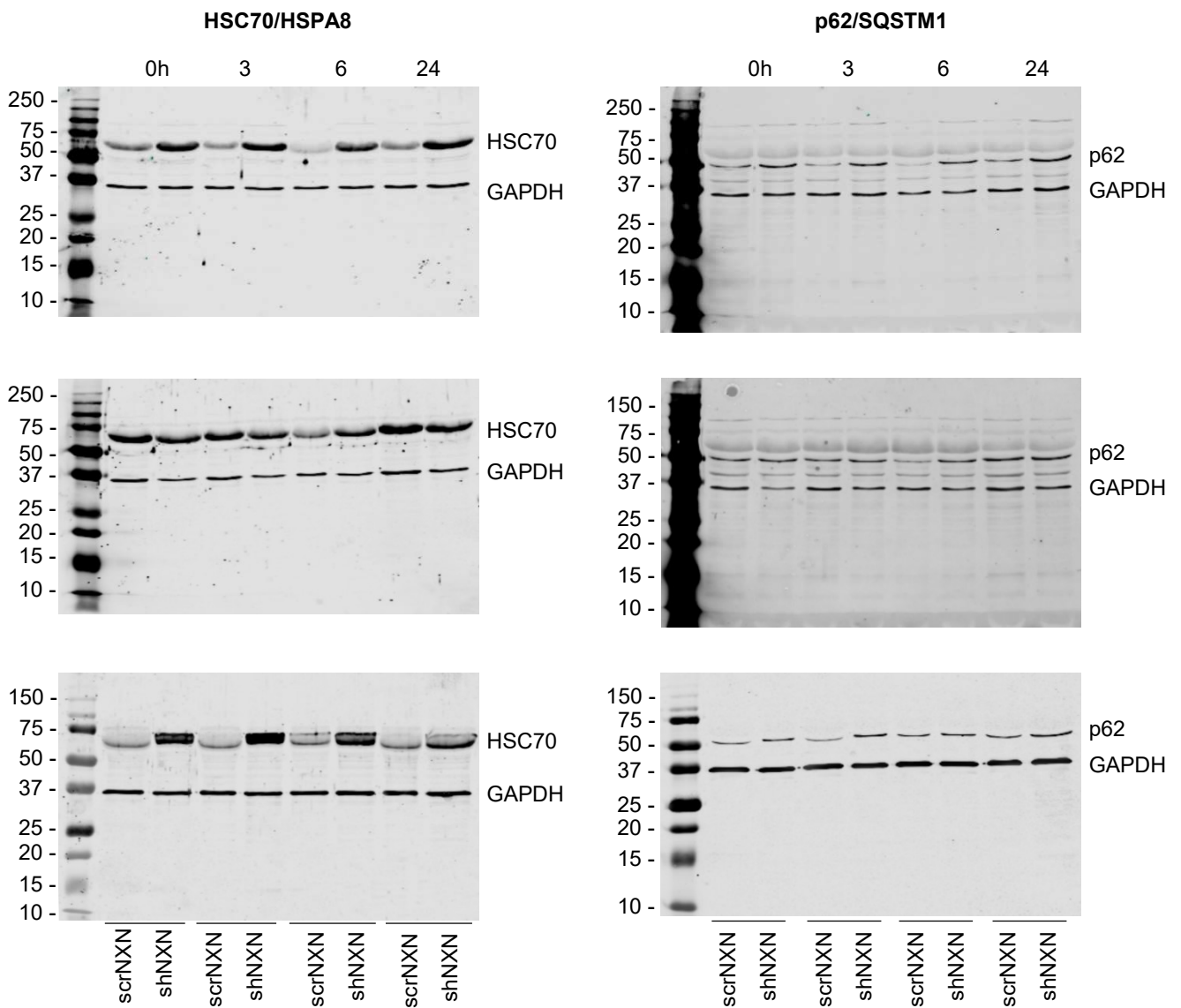
HSC70/HSPA8

UBE2D

LC3b
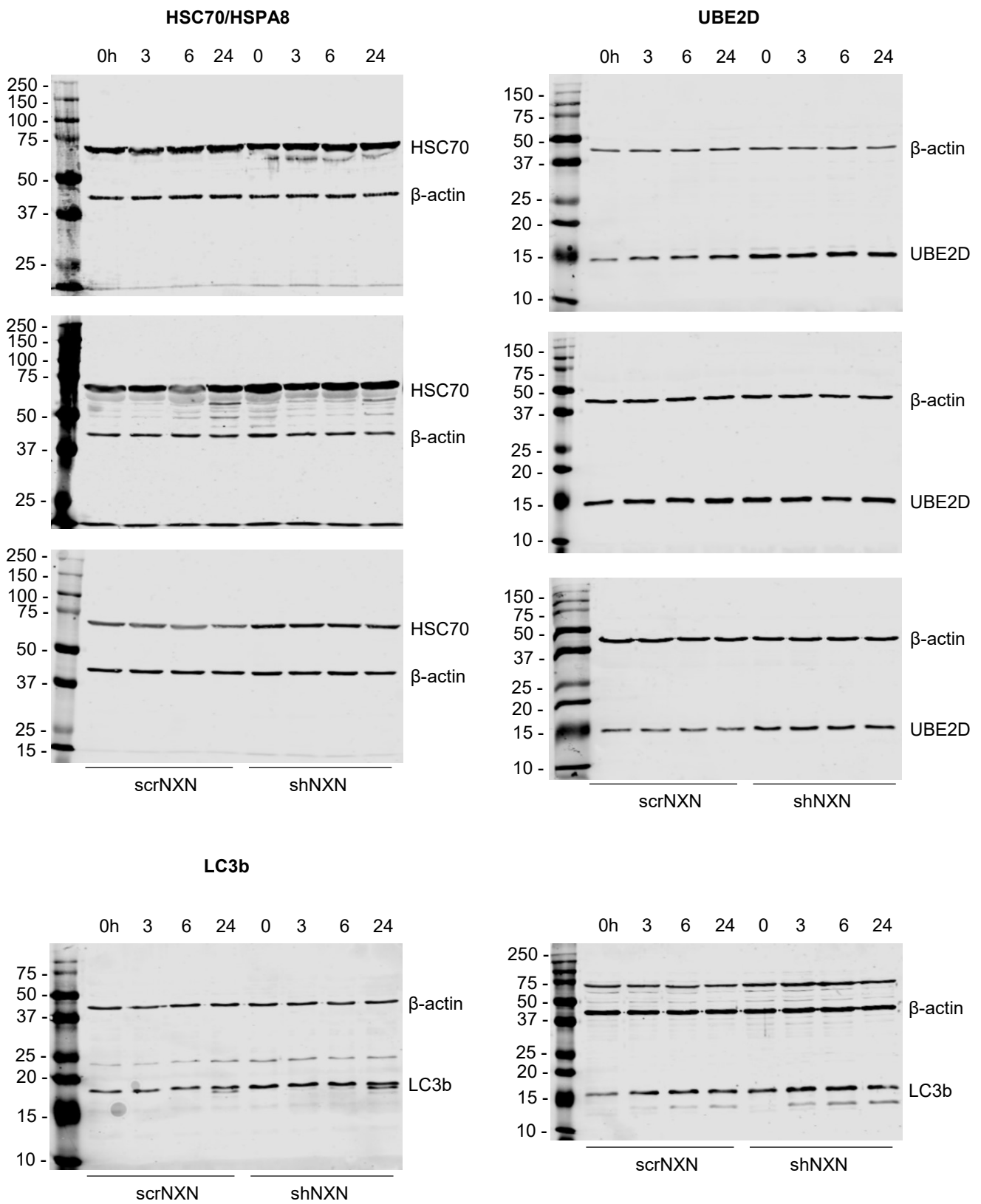
Suppl. Fig. 2: Uncut raw Western Blots presented in Figure 4. shNXN, shRNA against NXN, stably tranduced SH-SY5Y neuroblastoma cells; scrNXN, scrambled shRNA transduced control SH-SY5Y cells. Blots were sequentially developed and analyzed using infrared technology

Suppl. Fig. 3 Bafilomycin 1 µM (blots of Fig. 4)

p62/SQSTM1

HSP90
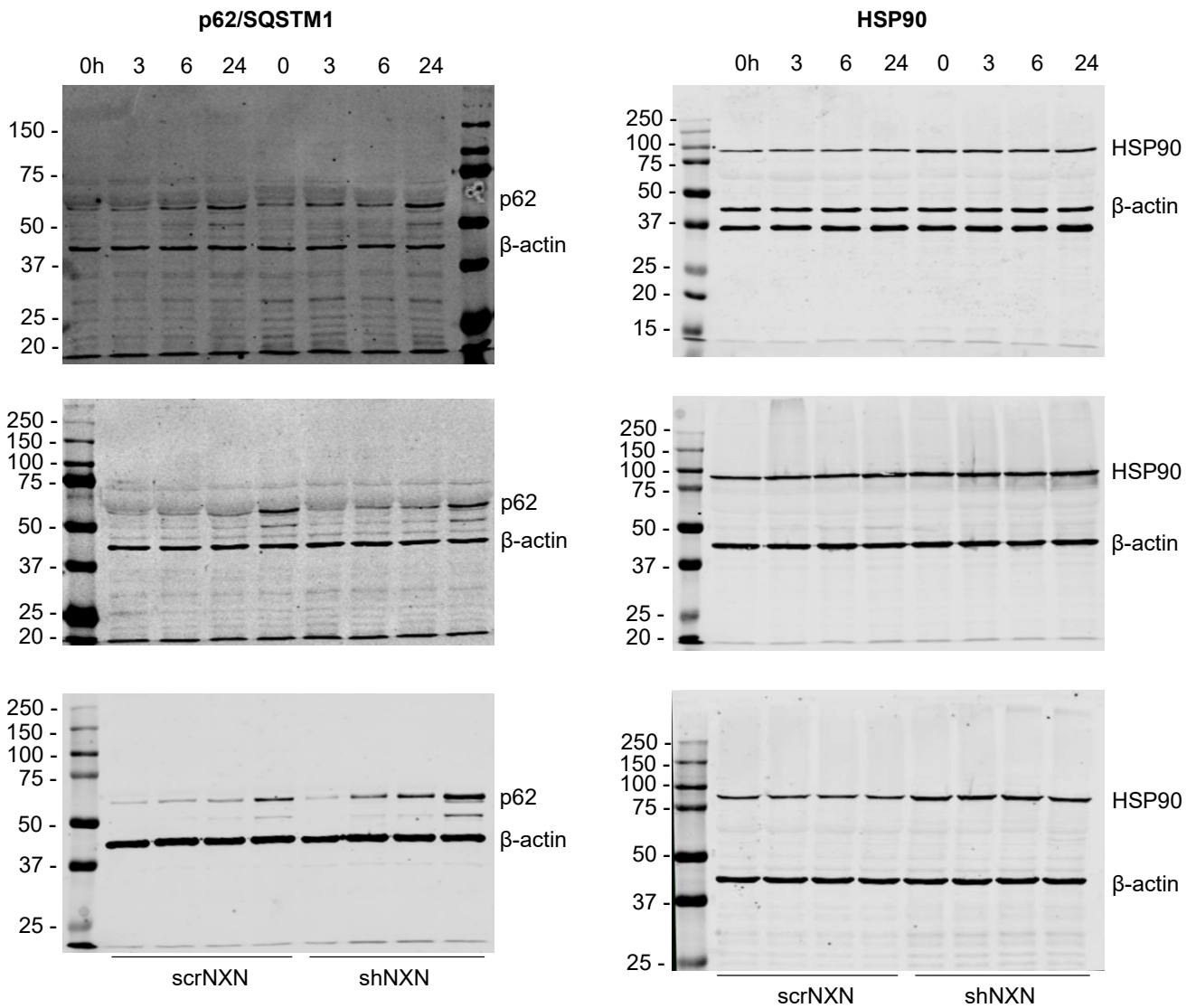
Suppl. Fig. 3: Uncut raw Western Blots presented in Figure 4. shNXN, shRNA against NXN, stably tranduced SH-SY5Y neuroblastoma cells; scrNXN, scrambled shRNA transduced control SH-SY5Y cells. Blots were sequentially developed and analyzed using infrared technology
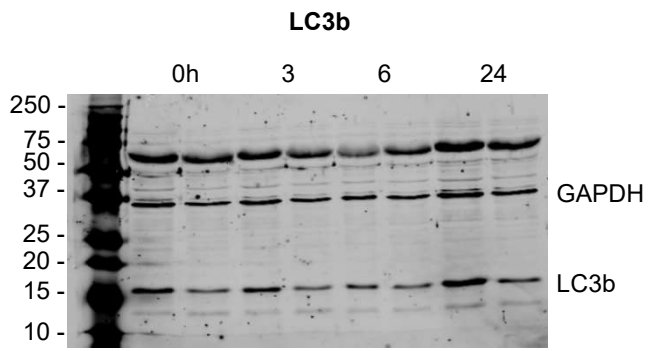
Suppl. Fig. 4 Rapamycin 1 µM (blots of Fig. 5)

Suppl. Fig. 4: Uncut raw Western Blots presented in Figure 5. shNXN, shRNA against NXN, stably tranduced SH-SY5Y neuroblastoma cells; scrNXN, scrambled shRNA transduced control SH-SY5Y cells. Blots were sequentially developed and analyzed using infrared technology

Suppl. Fig. 5 Rapamycin 0.1 µM (blots of Fig. 6)

Suppl. Fig. 5: Uncut raw Western Blots presented in Figure 6. shNXN, shRNA against NXN, stably tranduced SH-SY5Y neuroblastoma cells; scrNXN, scrambled shRNA transduced control SH-SY5Y cells. Blots were sequentially developed and analyzed using infrared technology

Suppl. Fig. 6 Rapamycin 0.1 μM (blots of Fig. 6)

Suppl. Fig. 6: Uncut raw Western Blots presented in Figure 6. shNXN, shRNA against NXN, stably tranduced SH-SY5Y neuroblastoma cells; scrNXN, scrambled shRNA transduced control SH-SY5Y cells. Blots were sequentially developed and analyzed using infrared technology