

**Table S4**  
**Antibodies**

Name	Species	Origin	Application	Dilution
<b>Primary antibodies</b>				
$\alpha$ -emerin	rabbit	#10351-1-AP, Proteintech	immunofluorescence	1:200
$\alpha$ -GFP	rat	#3H9, ChromoTek	Western blotting	1:1,000
$\alpha$ -laminA/C	mouse	# ab40567, Abcam	immunofluorescence	1:100
$\alpha$ -VAPB	rabbit	#14477-1-AP, Proteintech	Western blotting immunofluorescence	1:1,000 1:200
$\alpha$ -VAPB	mouse	#66191-1-Ig, Proteintech	immunofluorescence PLA	1:200 1:100
$\alpha$ -ACBD5	rabbit	#21080-1-AP, Proteintech	Western blotting immunofluorescence	1:1,000 1:100
$\alpha$ -OSBPL9	rabbit	#11879-1-AP, Proteintech	Western blotting immunofluorescence	1:1,000 1:1
$\alpha$ -TMEM43	rabbit	#ab184164, Abcam	Western blotting	1:1000
$\alpha$ -NUP153	rabbit	# HPA027897, Sigma-Aldrich	immunofluorescence	1:100
$\alpha$ -GAPDH	rabbit	#10494-1-AP, Proteintech	Western blotting	1:5000
$\alpha$ -Nup214	rabbit	Kehlenbach's lab	immunofluorescence	1:100
$\alpha$ -VAPA	rabbit	#15275-1-AP, Proteintech	immunofluorescence	1:200
$\alpha$ -mAB414	mouse	#MMS-120R, Covance	immunofluorescence	1:500
$\alpha$ -SQSTM1	rabbit	#18420-1-AP, Proteintech	Western blotting immunofluorescence PLA	1:1000 1:200 1:500
$\alpha$ -TIA1	mouse	#sc-101267, Santacruz Biotechnology	Western blotting	1:250
$\alpha$ -LAP2 $\beta$	rabbit	#06-1002, Millipore	immunofluorescence	1:100
$\alpha$ -ELYS	rabbit	# HPA031658, Sigma	immunofluorescence	1:100
$\alpha$ -Nup358	rabbit	Melchior's lab	immunofluorescence	1:50
$\alpha$ -FUS	rabbit	#HPA008784, Sigma	immunofluorescence	1:100
$\alpha$ -TDP43	rabbit	#10782-2-AP, Proteintech	immunofluorescence	1:500
$\alpha$ -LC3	rabbit	# PM036, MBL International	immunofluorescence	1:100
$\alpha$ -LAMP1	rabbit	#L1418, Sigma	immunofluorescence	1:100
$\alpha$ -HA	mouse	#MMS-101P_HA.11 Clone 16B12, Covance	immunofluorescence	1:500
$\alpha$ -HA	rabbit	# 11867423001, Sigma	immunofluorescence	1:500
$\alpha$ -Na <sup>+</sup> /K <sup>+</sup> ATPase	mouse	#sc-21712, Santacruz Biotechnology	Western blotting	1:200
<b>Secondary antibodies</b>				
$\alpha$ -rabbit-HRP	donkey	#711-035-152, Jackson ImmunoResearch Laboratories, West Grove, PA, USA	Western blotting	1:5,000
$\alpha$ -rat-HRP	goat	#112-035-003, Jackson ImmunoResearch Laboratories, West Grove, PA, USA	Western blotting	1:10,000
IRDye® 800CW $\alpha$ - rabbit IgG (H + L)	donkey	LI-COR Biosciences	Western blotting	1:10,000
IRDye® 800CW $\alpha$ - mouse IgG (H +	donkey	LI-COR Biosciences	Western blotting	1:10,000

L)				
$\alpha$ -rabbit-Alexa Fluor 488	donkey	#A-21206, Molecular Probes, Eugene	immunofluorescence	1:1,000
$\alpha$ -mouse-Alexa Fluor 488	donkey	#A-21202, Thermo Fisher Scientific	immunofluorescence	1:600
$\alpha$ -mouse-Alexa Fluor 594	donkey	#A-21203, Thermo Fisher Scientific	immunofluorescence	1:750
$\alpha$ -rabbit-Alexa Fluor 594	donkey	#A-21207, Thermo Fisher Scientific	immunofluorescence	1:750
$\alpha$ -rabbit-Alexa647	donkey	#A-31573, Thermo Fisher Scientific	immunofluorescence	1:500