ARTICLE



¶áfbb



Merged SEC16 ATG13 D

The second seco

•Ma•g e 0.51.5 13 , * h / _ i / * i i * , , . € f 250) 8 b b € e,e s 250) se Tanne se tanne se aggeb che f**illege**al **veneti**£a**it**te veneve hejevet63 va **due u**300 wakt ¥63 well anget aft d tle fit anb (F6). IB3 thight nered(), ea(), aa () de Schladette

⁴⁸. 🏘

μ

ted calta e bl,f elg(gfeebf ette de lafte d Attlf B3 ågg gfeete etge f wyn Oewe d te 163 detetela a ga(§6). Wetefa BER4 b HengebBP fl That a f t B BB (Seg 6 and POO[?] (abfe Kiege 6, m fube PHe IV g 6b abee feels 16 (SE 6), bathf and K and K etsfol and ug dof BPS def teata100 vel(€6), c ead add be digen Wend 2 345

6**S**N

₩££gægæt(eb_e ₩eæ)a. æBiblea

dt et dt f e a

⁴⁹**≺æ**∯

16

10/146K (ह7 5)≥. ह7, 163 44: 4eile≪t≪t 126 att 133. M(§ 5); \$\$ tete (§ 5). Settee fe 8 18 e K e dee ntacintinger ntjegeleint fætere



_

teretense b Hensethere Wideraf 103 ut 103 ut 103 ut 105 colution 105 co

ef 2030 d6070 when etablic \mathcal{B} we change \mathcal{B} we c

0 50 **vide**e

14,25

a ATG13

ekkinin 163 eka ≪eBa£3 (§7)d ©e164 el

His a where the 23,24



F/μ 7 A 1/2 (a) 2/2 (b) 2/2 (a) 3/2 (c) 3/2

Merge ATG13 ER --

Merge ATG13 ER --

Merge ATG13 ER

Merged ATG13 z1 z1

z1 ii

ER

ii

ER

ATG13

Merge

ii

ER

Merged ATG13

iii

iii

ARTICLE



ARTICLE

nt 163 e (F10 stelle	#\6.e_	⁵⁵ desd	
Relieve also and and a second a	al and a second data	Y	56
interimped for (123			, .
blest at the second sec	finish IC dis SIIC3 into		
-c(g) 10 generation			
ng tan tagint M/Alat de M2 at			
	te se tet te ette		
	Cha sarreg	53 m	
g10) entrest		· .	
∎ebgeiß3 igaa a	tus k cours	4	
ængent neftegf		14	¹ . Age
et al la	f nen s brens K e		Ŷ
	Bette En a		
Denn	57. 57.		
Mithelet K en	akuea Rind		
	Citation of R		
	au (57 d 8) e fue B		
Kie ander			
weine	et acto a Bo		
district Witterste	unue fue 184 e 1164 al		
where B where	BP diele geb	22.24	
f KG e, undef KGc	vafi Ded	^{23,24} . E	
with Birth B	163 99 168 4 e T	Ŷ	
RAME 8	efacte feß4 e		
ene in in the state	vient B will		
landel BRate	- bre 8	16	
The share the	Tister & ender		
14,32,51,52	RH find	22,35 H	
¹⁶ abag	• # 8 5 8	. <i>y</i> a	
	bathan fan 8 dahan		
CI CL.DCHIMHANSTE CI			
	The second secon		
ung gut	we ge gwe BPwe		
COT LANSAND	(all the state of		
δNa, the teg KI al SG	greikie (1943 all200) ate		
	val≱ (1946;g/6). 14gd		
e o 50 welgendwe 2683	a126≪4112Va2P00 (£58,59) al		0.16
nt (g 7 a). The sade	EC ≪new ne DO g		^{8,16} . I y
the line 8	analy all the factor		
(Èg [?] 10 [°] g). aT∙ta∙te b& alg8	P 00	⁶⁰ . Ru h	
ΔÃ 🖷 veff BPB(Ε/7 a), ^Υ	Bifeen		
a 8.44 ⁵⁴ . Une te			
wab welve 173 b	bobefinitet		
	ut dat halfut		
nd (h) I not not deb	RP: and Michael		
Ny P), ⊥, ¬ − − − − − − − − − − − − − − − − − −			
	των ↓ Ω ατττάτια a dalf		
971777 N C 200074101			
Charles Cart	HILE ON THE		
	· · ·		

y. ATG13 a ER. HEK293 cells stably expressing GFP-ATG13 and transiently expressing Je/,μ 10 Cyμ a, ___e/ a, ___ Νη mCherry-dgk1 (ER marker) were starved, subjected to live-cell imaging by wide-field microscopy and fixed on stage. (a) Fluorescent images of the frame capture just before the fixation, 100 and 10 DIC images of the fixed cells are shown. Red box in 10 DIC image indicates the cell of interest. (b) Image of the resin-embedded sample. Cell of interest located in red box. () Resin blocks were trimmed down to a block face of 1 mm² and mounted on stub for imaging in an Auriga focused ion beam scanning electron microscopy (FIB-SEM, Carl Zeiss). Overview images before (left) and after milling (right) indicating the cell of interest with a red box. () Montage of an ATG13 particle formation from the live-cell imaging step and stacks after fixation (particle ii in .) 🖌) Overlays of light and electron microscopy images. Light and electron microscopy images were correlated using landmarks identified in both (shown in white and green lines, circles and triangles). (.) Three-dimensional (3D) opacity rendering of the FIB-SEM image stack. The areas outlined in red within the green boxes indicate ATG13 particles. Particle ii is the one that could be traced throughout the experiment and was identified in both live-cell and FIB-SEM imaging. ATG13 Particles in boxes i and iii could be identified from the wide-field and fluorescence image, but their provenance by live imaging could not because they were on a different focal plane from particle ii. (i-iii). Shown are the view from the middle of the ATG13 signal, and orthogonal and views along the thin white lines. (*) 3D Opacity rendering of the cropped FIB-SEM stacks int/ with overlay of the ATG13 signal (red). Rendered in green are the membranes detected in the FIB-SEM stack that are in proximity of the ATG13 particle. Stars indicate mitochondrial membranes. Bars: 10 μm (a), 50 μm (b), 5 μm (μ), 1 μm () and 0.25 μm (/).

∙gendebfgl

nanasista calakti Alaba

22. AND RACBM& N We **24,** 29182931 (2013). . . 23. EL ADZM& & REPE ne a**ebefe£ne**lef •**8** 2, 00947 (2013). 24. EL, ZM& & RB-adD ¶£¶¶¶£ **3**, **0**4135 (2014). 25. BSI, RT& BWEEnfd tee . 135, 1935 (1996). . . **4**473) Rife 26. **H** edaldik 88 7, 1726 (2011). A27. **HZ** . **DAR**DNEE . A 2012, 69816986 (2012). d Ä. 28. W ۰e . 85 the Filting 29. **B**MA . A . . A **107,** 78117816 (2010). ÷. 30. TD . altifelitere ₩facfQ;;;; 8 A . . A **110,** 1943219437 (2013). 31. YARJ . ¶aKre∯fa . 11 , 38883900 (2006). Attil 32. QA Bible fig. 4 nghatag digg 23, 18601873 (2012). . 33. **K**S . 4A 4444885 aV . . . **287,** 4426144269 (2012). **WHE** 34. SKKY6T& OY 12, 209218 (2007). etteta 35. SK AMAKONH& OYF g**i git dy**fi 36. KT& MY33 4494 . 126, 25342544 (2013). . . . 36, 585595 (2015). tl,e . • #3 al200 • #1 U al2 37. 🔊 A[?] 7, 14241433 (2011). ĝl 38. <mark>B</mark>PL . 866 adifality . 15, 14391447 (2005). . 39. **e**hC& H-Parga te(BG aft+Balt . . 11 , 21732183 (2006). . Seetsjeks 40. K_ ¢ A 41. ST& 6E**RAGE** . . , 731738 (2013). 26, 348364 (2011). 42. RMGEYW& TSARdel •eadig . 185, 305321 (2009). . 43. 45 J, YLC BJ S& KRDR H Greek BA