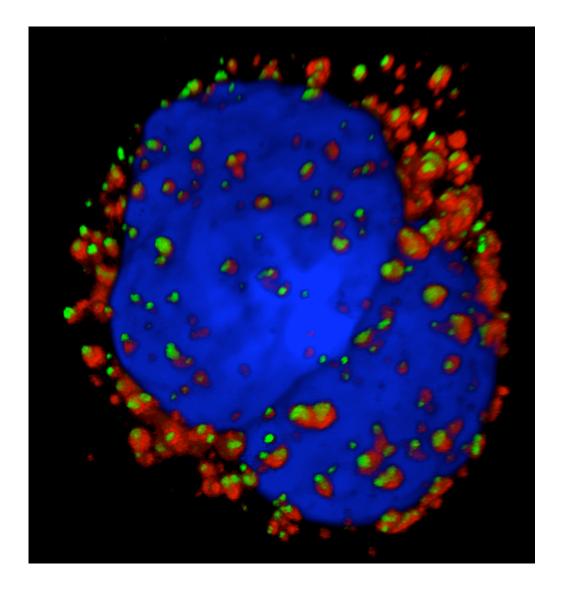
Supplemental Fig. 1



Intracellular co-localization of myc-huGIMAP5 and the lysosome marker cathepsin D. 3D image of a dividing, tetracycline-induced myc-huGIMAP5 TRExTM Jurkat T cell stained against the myc epitope (red) and cathepsin D (green), and nuclei were counterstained with DAPI (blue). Cells were treated with tetracycline for 24hrs in culture to induce GIMAP5 expression and were imaged on a Zeiss LSM510 confocal microscope. A 3D model of the cell was generated using Volocity software (Perkin Elmer). A direct opacity renderer was applied to the raw confocal image data with the density set high, creating the appearance of solid objects in the rendered image.

SUPPLEMENTARY TABLES

<u>Supplemental Table 1</u>: Details of anti-GIMAP monoclonal antibodies developed 'in-house' and used in this study.

GIMAP#	mAb	Isotype	Strain	Fusion	Immunogen: GST	Vector/Bacteria	Immunogen form
	name			partner	fusion with:-		
mGIMAP1	MAC420 ¹	Rat γ2a	LOU/C	Y3Ag1.2.3 ²	mGIMAP1aa1-238	pDEST15/RosettaDE3	Soluble/gel-purified
mGIMAP5	MAC421	Rat γ2a	LEW	Y3Ag1.2.3	mGIMAP5aa1-270	pDEST15/RosettaDE3	Soluble
hGIMAP5	MAC428	Rat γ1	LOU/C	IR983F ³	hGIMAP5aa1-211	pGEX.4T1/Rosetta	Inclusion bodies
hGIMAP5	MAC429	Rat γ1	LOU/C	Y3Ag1.2.3	hGIMAP5aa1-211	pGEX.4T1/Rosetta	Inclusion bodies
rGIMAP5	MAC427	Mouse γ1	BALB/c	NS0 ⁴	rGIMAP5aa1-276	pGEX.4T1/Rosetta	Inclusion bodies

- 1. See suppl. ref. 1.
- 2. See suppl. Ref.2.
- 3. See suppl. Ref. 3
- 4. See suppl. Ref. 4.

<u>Supplemental Table 2</u>: Externally-acquired antibodies and other marker reagents used in this study

(A) Antibodies used for western blotting.

Primary Antibody	Clone	Source	
Rat anti-mGIMAP1	MAC420	See Suppl. Table 1	
Rat anti-mGIMAP5	MAC421	See Suppl. Table 1	
Rat anti-hGIMAP5	MAC428, MAC429	See Suppl. Table 1	
Mouse anti-rGIMAP5	MAC427	See Suppl. Table 1	
Mouse anti-myc	9E10	Prepared in-house (courtesy of Dr. S.	
Wouse afti-fffyc	9610	Cook)	
Mouse anti-β-actin	AC-15, ascitic fluid	Sigma	
Mouse anti-HA	12CA5	Prepared in-house (courtesy of Dr. S.	
Wouse altti-riA	12CA3	Cook)	
Rabbit anti-VDAC-1/Porin	polyclonal	Calbiochem (PC548T)	
Mouse anti-Hsp90	68	BD Biosciences	
Rabbit anti-TAP1 (D90)	polyclonal	See suppl. ref. 5	
Mouse anti-GM130	35	BD Transduction Laboratories	
Rabbit anti-TGN38	polyclonal	Abcam (ab16059)	
Rabbit anti-calnexin	C4731	Sigma	
Rat anti-LAMP1	1D4B	Courtesy of Dr G. Griffiths	
Rat anti-LAMP2	ABL-93	Grown in-house from hybridoma	
Mouse anti-hLAMP2	H4B4	Santa Cruz Biotech (sc-18822)	

Secondary Antibody	Clone	Source	
Goat anti-rat IgG HRP		Jackson ImmunoResearch	
Goat anti-mouse IgG HRP		Sigma A4416	
Goat anti-rabbit IgG HRP		DAKO Cytomation	

(B) Antibodies used for immunocytochemistry.

Primary Antibody	Conjugation	Clone/cat. No.	Source
rat anti-mGIMAP1		MAC420	See Suppl. Table 1
rat anti-hGIMAP5		MAC428, MAC429	See Suppl. Table 1
mouse anti-myc		9E10	Prepared in-house (courtesy
			of Dr. S. Cook)
rabbit anti-calnexin		C4731	Sigma
rabbit anti-giantin		24586	AbCam
mouse anti-GM130		35	BD Transduction Laboratories
mouse anti-cytochrome c		6H2	Santa Cruz Biotech
mouse anti-γ-tubulin		GTU-88, ascitic fluid	Sigma
rabbit anti-cathepsin D		Protein A-purified	Upstate Biotech (06-467)
		polyclonal antiserum	

mouse anti-hLAMP2		H4B4	Santa Cruz Biotech (sc-18822)
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Secondary antibodies	Conjugation	Clone/cat. No.	Source
goat anti-rat IgG	Alexa Fluor 568	A11077	Invitrogen Molecular Probes
goat anti-rabbit IgG	Alexa Fluor 488	A11008	Invitrogen Molecular Probes
goat anti-mouse IgG ₁	Alexa Fluor 488	A11001	Invitrogen Molecular Probes

Supplementary references

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- (2) Galfrè G., Milstein, C. & Wright, B. (1979) Rat x rat hybrid myelomas and a monoclonal anti-Fd portion of mouse IgG. *Nature* **277**:131.
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- (4) Galfrè G. & Milstein, C. (1981) In: *Methods in Enzymology* vol. 73, part B, eds. J.J.Langone & H. Van Vunakis, pp. 3-46. New York: Academic Press.
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