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CORRECTION

Correction: Kennedy Epitope (KE)-dependent Retrograde Transport of Efficiently Cleaved HIV-1 Envelopes (Envs) and its Effect on Env Cell Surface Expression and Viral Particle Formation

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In the original version of this article the wrong figures appeared as Figs. 2, 3, 4, 5, 6, and 7, the figures should have appeared as shown below.

In addition, Supplementary file was originally published with the wrong Figs. 1, 2, 3 and now it has now been replaced with the correct file.
The original article has been corrected.

The original article can be found online at https://doi.org/10.1007/s10930-023-10161-1.

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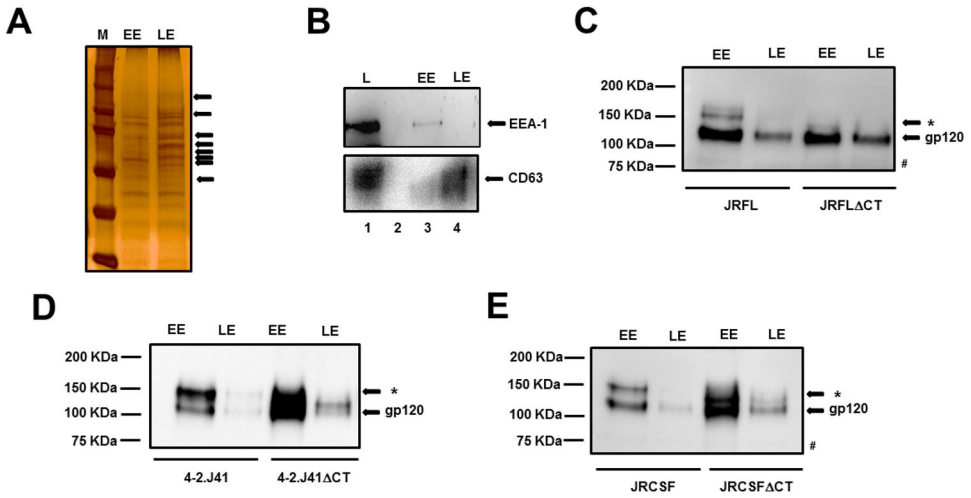

Fig. 2 $4-2.J41\Delta CT_{711}$ and $JRCSF\Delta CT_{704}$ Envs but not $JRFL\Delta CT_{703}$ Env are defective in retrograde transport as compared to wild-type Env. **A** Equivalent loading of lysates prepared from isolated early endosomal (EE) and late endosomal (LE) fractions. Lysates were prepared, protein concentration was determined and equal amount of protein from both compartments were analyzed by SDS-PAGE followed by silver staining. Arrows show bands that are predominant in either EE or LE fractions. **B** Western blot analysis of lysates prepared from isolated early endosomal (EE) and late endosomal (LE) fractions with antibodies against the early endosomal marker EEA-1 and late endosomal marker CD63. **C** Western blot analysis of JRFL and $JRFL\Delta CT_{703}$ Envs present in lysates (equal amount of protein loaded) prepared from early endosomal (EE) and late endosomal (LE) fractions isolated from transfected 293Tcells using rabbit polyclonal antibody (clade B gp120-specific). **D** Western blot analysis of $4-2.J41$wt and $4-2.J41\Delta CT_{711}$ Envs present in lysates (equal amount of protein loaded) prepared from early endosomal (EE) and late endosomal (LE) fractions isolated from transfected 293T cells using rabbit polyclonal anti-clade C gp120-specific antibody. **E** Western blot analysis of JRCSF and $JRCSF\Delta CT_{704}$ Envs present in lysates (equal amount of protein loaded) prepared from purified early endosomal (EE) and late endosomal (LE) fractions isolated from transfected 293Tcells using polyclonal antibody (cladeB gp120-specific). C, D and E are representative examples of two independent experiments. The * denotes gp160 or gp160ΔCT

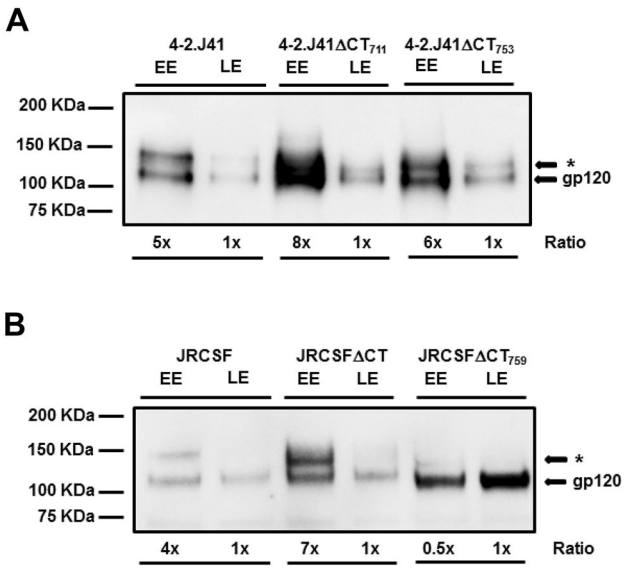

Fig. 3 Wild type retrograde transport is restored in $4-2.J41\Delta CT_{753}$ Env and $JRCSF\Delta CT_{759}$ Env. **A** Western blot analysis of $4-2.J41$wt, $4-2.J41\Delta CT_{711}$ and $4-2.J41\Delta CT_{753}$ Envs present in lysates prepared from early endosomal (EE) and late endosomal (LE) fractions isolated from transfected 293Tcells using polyclonal anti-body (clade C Env gp120). **B** Western blot analysis of JRCSF, $JRCSF\Delta CT_{704}$ and $JRCSF\Delta CT_{759}$ Envs present in lysates prepared from early endosomal (EE) and late endosomal (LE) fractions isolated from transfected 293Tcells using polyclonal antibody (clade B Env gp120). **A** and **B** are representative examples of two independent experiments. Ratio of band intensity between EE and LE compartments are shown at the bottom of each figure. The * denotes gp160 or gp160ΔCT

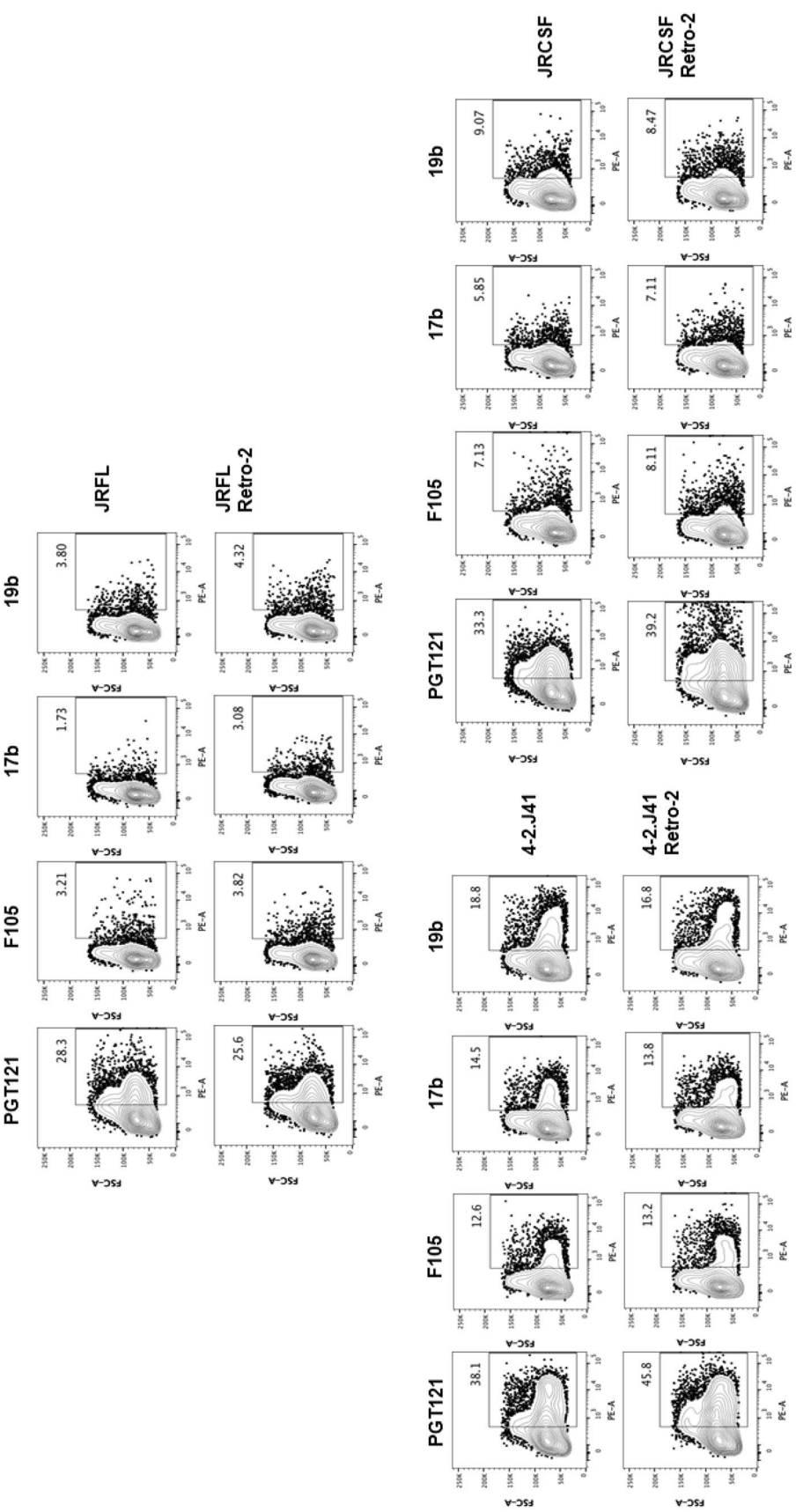

Fig. 4 FACS analysis for cell surface binding of antibodies with or without Retro2 treatment. Gated population in the FACS contour plots showing the percent positive cells stained with PGT121, F105, 17b and 19b antibodies on the cell surface of 293T cells transfected with functional Envs; JRFL vs JRFL treated with Retro 2, JRCSF vs JRCSF treated with Retro 2 and 4 – 2. J41 vs 4 – 2.J41 treated with Retro 2. Data were analyzed by FlowJo software v10. Data is representative of two independent experiments

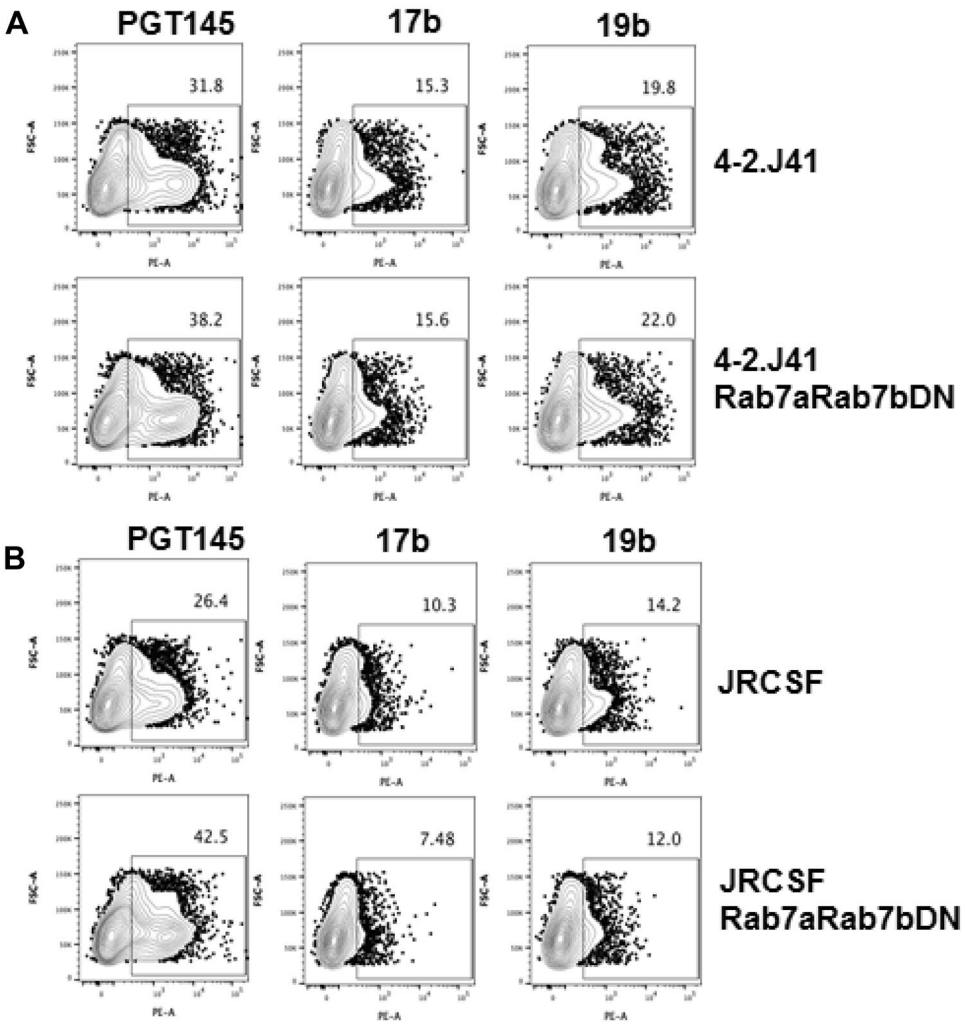

Fig. 5 FACS analysis for cell surface binding of antibodies in the absence or presence of Rab7aDN and Rab7bDN. Gated population in the FACS contour plots showing the percent positive cells stained with PGT145, 17b and 19b antibodies on the HEK 293T cells transfected with functional Envs **A** 4 − 2.J41 vs 4 − 2.J41 and Rab7aRab7bDN, and **B** JRCSF vs JRCSF and Rab7aRab7bDN. Data were analyzed by FlowJo software v10. Data is representative of two independent experiments

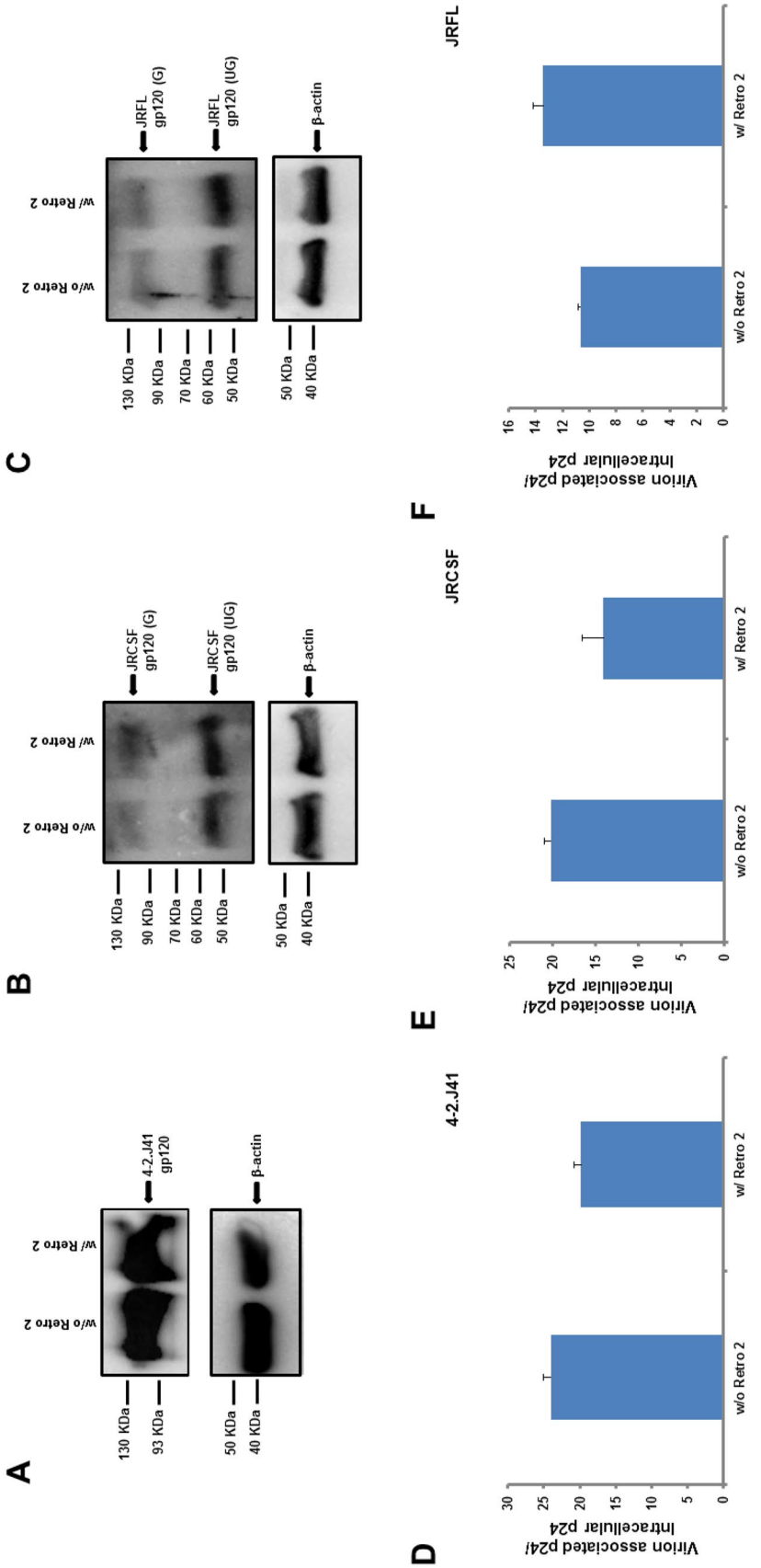

Fig. 6 Retro 2 differentially affects pseudoviral particle formation with the Envs 4 – 2.J41, JRCSF and JRFL. **A–C** Expression of 4 – 2.J41, JRCSF and JRFL Envs co-transfected with pctat and SG3-ΔEnv in 293T cells in the presence and absence of 25 µM Retro 2 treatment. β-actin was used as loading control. G: glycosylated; UG: unglycosylated. **D–F** HIV-1 p24 was measured by ELISA in supernatant and lysate of 4 – 2.J41, JRCSF and JRFL Env-expressing transfected 293T cells treated with and without 25 µM Retro 2 as described in Materials and Methods. Ratio of virion associated p24 to intracellular p24 was calculated by dividing total p24 in supernatant by total p24 in lysate. D, E and F are representative examples of two independent experiments

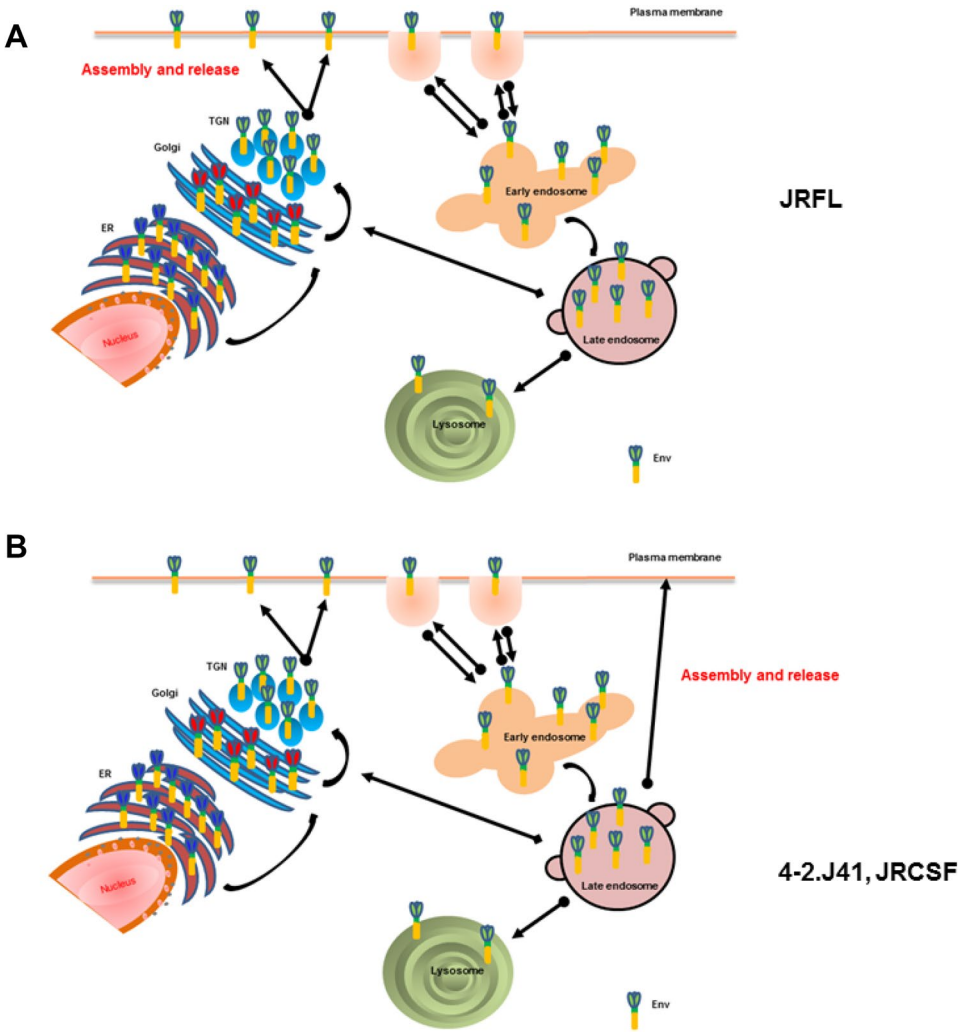

Fig. 7 Schematic representation of the different pathways for assembly and release of viral particles containing different efficiently cleaved Envs

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10930-023-10172-y.

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