

SUPPLEMENTAL MATERIAL

Kretzer et al., <https://doi.org/10.1084/jem.20160597>

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mRAB43 1 MAGP--GPGDQDEHYDFLFKLVLVGDASVGKTCVVQRFKTGAFSARQGSTIGV
hRAB43 1 MAGPGPGPGDPDEQYDFLFKLVLVGDASVGKTCVVQRFKTGAFSERQGSTIGV
      ****  ****  *:*****

mRAB43 54 DFTMKTLEIQGKRVKQLIWDTAGQERFRITIQSYRSANGAILAYDISKRSTF
hRab43 56 DFTMKTLEIQGKRVKQLIWDTAGQERFRITIQSYRSANGAILAYDITKRSSF
      *****:***:

mRAB43 107 LSVPHWIEDVRKYAGSNIVQLLIGNKSDLADFRVPLAEAQSLAEHYDILCAI
hRAB43 109 LSVPHWIEDVRKYAGSNIVQLLIGNKSDLSELREVSLAEAQSLAEHYDILCAI
      *****:;***,*****

mRAB43 160 ETSAKDSSNVEEAFTRVATELIMRHGGPMFSEKNTDHIQLDSKIDAESWGCGC
hRAB43 162 ETSAKDSSNVEEAFLRVATELIMRHGGPLFSEKSPDHIQLNSKIDIGEGWGCGC
      *****:***,*****:***,*
    
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Figure S1. **Sequence alignment of RAB43.** (A) Sequence alignment for mouse RAB43 (mRAB43) and human RAB43 (hRAB43). Conserved sequence (\*), conservative mutation (:), semiconservative mutation (.), and nonconservative mutation () are shown.

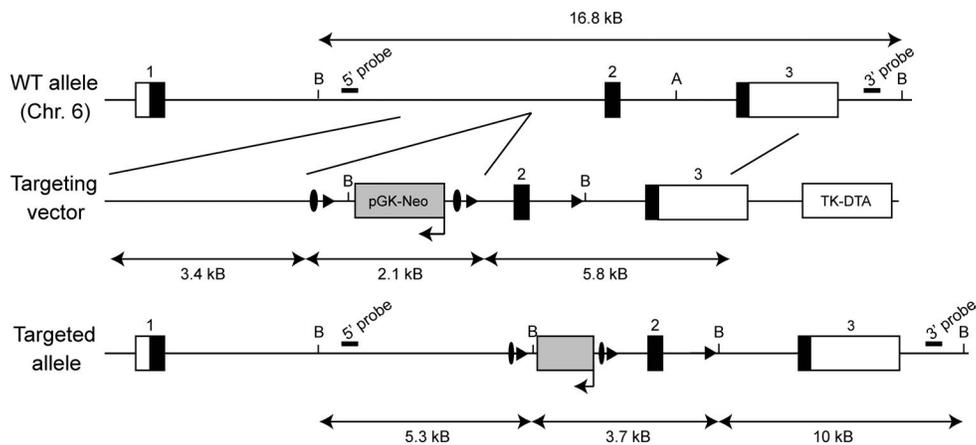
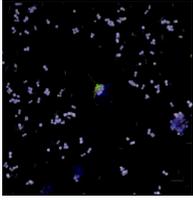
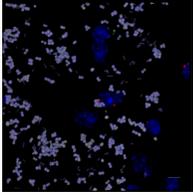


Figure S2. **Targeting strategy for *Rab43*<sup>CKO</sup>.** Shown are the *Rab43* genomic locus, targeting vector, and mutated allele before removal of the neomycin cassette (pGK-Neo). Exons are displayed as boxes with coding regions shaded. An orphan LoxP sequence was inserted at the *AccI* site (A). Correctly targeted alleles show a 5.3-kB band detected by the 5' probe and a 10-kB band detected by the 3' probe. Chr., chromosome; DTA, diphtheria toxin A expression cassette; TK, thymidine kinase promoter; triangles, LoxP sequences; ovals, FRT sequences.



Video 1. **Localization of RAB43 after HKLM-OVA internalization.** Rotating Z stack of sorted SiglecH<sup>+</sup>CD11b<sup>+</sup>Sirpa<sup>-</sup>Bst2<sup>-</sup> cells from FLT3 cultures of WT B6 BM were incubated with Alexa Fluor 647-labeled HKLM-OVA (white) and were allowed to attach to coverslips, fixed, and stained for giantin (red) and RAB43 (green). Coverslips were attached to slides using ProLong Gold antifade with DAPI (blue).



Video 2. **HKLM-OVA localization in RAB43-deficient DCs.** Rotating Z stack of sorted SiglecH<sup>+</sup>CD11b<sup>+</sup>Sirpa<sup>-</sup>Bst2<sup>-</sup> cells from FLT3 cultures of *Rab43*<sup>Δ/Δ</sup> B6 BM were incubated with Alexa Fluor 647-labeled HKLM-OVA (white) and were allowed to attach to coverslips, fixed, and stained for giantin (red) and RAB43 (green). Coverslips were attached to slides using ProLong Gold antifade with DAPI (blue).