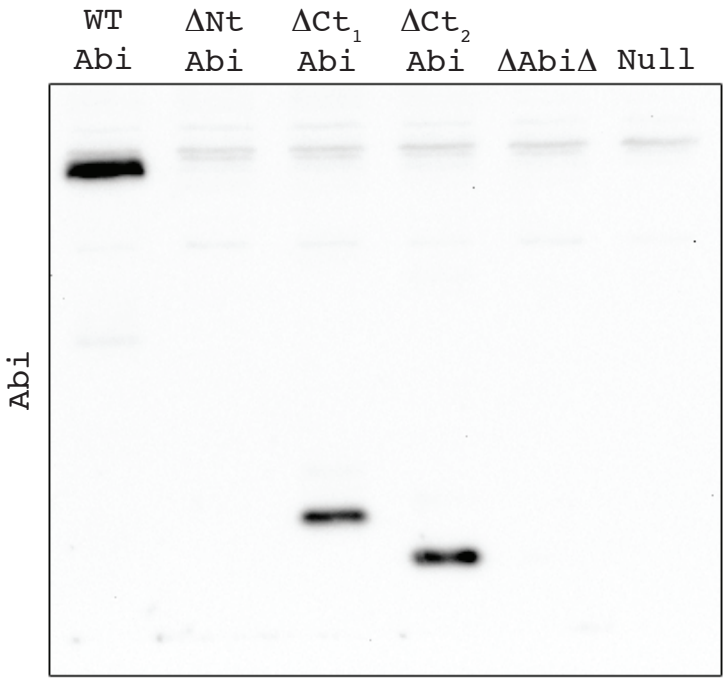
Davidson et al.

Supplementary figures.

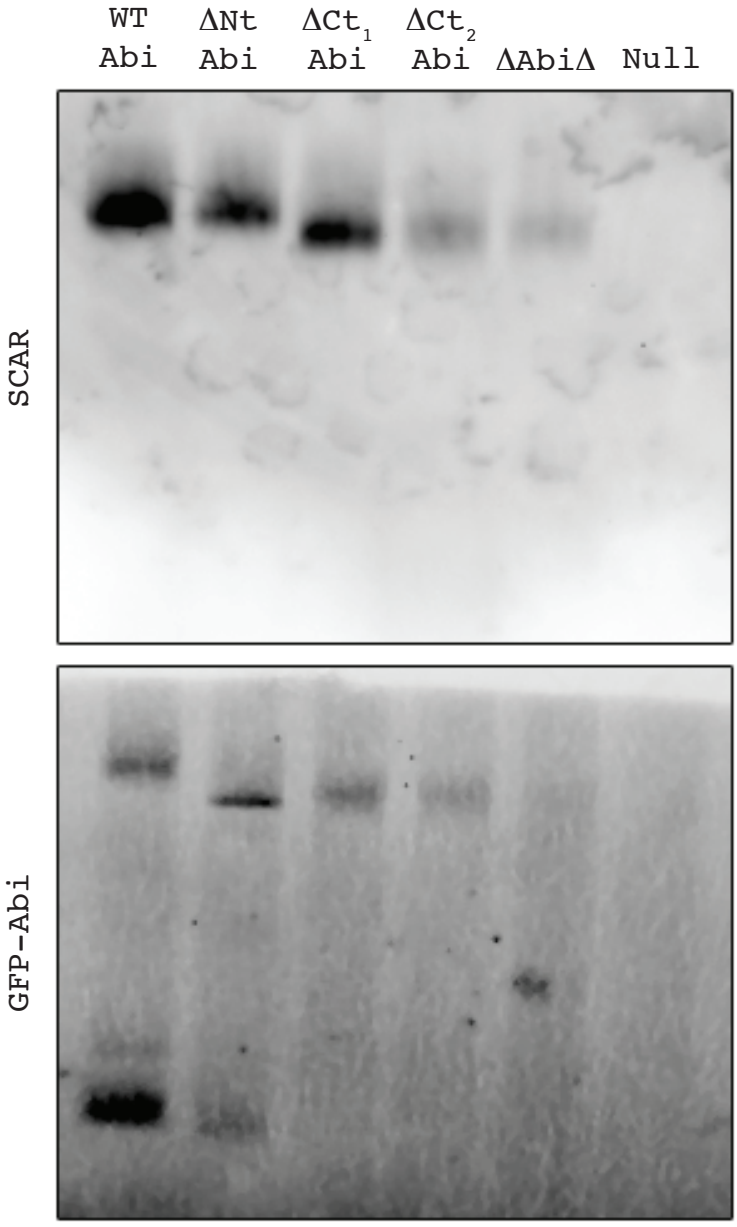
Supplementary Figure 1



Supplementary Figure 1: Detection of untagged Abi constructs.

Expression of the untagged truncated Abi deletion series was confirmed with an anti-Abi antibody following Western blot. Unfortunately, the loss of anti-Abi N-terminal epitope confounded detection of all of the constructs (i.e. ΔNt Abi and ΔAbiΔ). WT= full length Abi, ΔNt= N-terminally truncated Abi, ΔCt= C-terminally truncated Abi, ΔAbiΔ= combination of both N-terminally and C-terminally truncated Abi, Null= HSPC300-GFP only vector.

Supplementary Figure 2



Supplementary Figure 2: *Dictyostelium* SCAR and Abi constructs exist together in one high molecular weight complex.

Native blue PAGE separation demonstrating the stabilization of the entire SCAR complex by the Abi fragments, which are both found in the one complex.

TOP: Complete blot from fig. 2C showing stabilization of SCAR by the untagged Abi fragments and the inclusion of SCAR in a single high molecular weight complex. Intact protein complexes were separated by native blue PAGE and probed with anti-SCAR antibody.

BOTTOM: intact protein complexes from *abi*A nulls transformed with GFP-tagged Abi deletions separated by blue native PAGE and probed with anti-GFP antibody. Abi, unlike SCAR, partially dissociates from the complex with Abi monomers evident at bottom of image. However, the high molecular weight SCAR complex from the top panel clearly contains Abi truncations. WT= full length Abi, ΔNt= N-terminally truncated Abi, ΔCt= C-terminally truncated Abi, ΔAbiΔ= combination of both N-terminally and C-terminally truncated Abi, Null= HSPC300-GFP only/empty GFP-vector.

Movie 1: SCAR complexes containing minimal ΔAbiΔ fragment localise normally in migrating cells.

Top row: DIC images of migrating cells co-expressing SCAR complex marker HSPC300-GFP and either WT Abi (left panel) or ΔAbiΔ (right panel).

Bottom Row: TIRF images corresponding to the above DIC images demonstrating that SCAR complexes containing the minimal ΔAbiΔ fragment are fully capable of localizing to pseudopodia during cell migration.