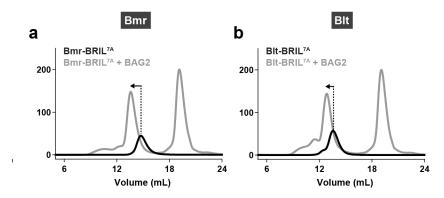
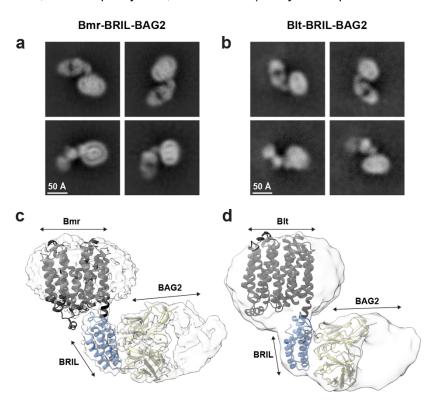
## FIGURES/PRELIMINARY RESULTS

**Figure 1. Preparation of Bmr-BRIL-BAG2 and Blt-BRIL-BAG2 complexes.** SEC chromatograms displaying Bmr-BRIL (a) and Blt-BRIL (b) in PMAL-C8 amphipol in the presence and absence of the anti-BRIL Fab (BAG2). The left shift of the chromatogram in the presence of BAG2 shows formation of the larger transporter-BRIL complexes.



**Figure 2: Preliminary cryo-EM data on Bmr-BRIL-BAG2 and Blt-BRIL-BAG2 complexes.** (a, b) Exemplary 2D classes of Bmr-BRIL-BAG2 (a) and Blt7A-BAG2 complexes (b). (c, d) Superimposition of cryo-EM maps of Bmr-BRIL-BAG2 (c) and Blt-BRIL-BAG2 complexes (d) displayed in partially transparent grey surface and the corresponding predicted model shown in cartoon (Bmr and Blt in dark grey; BRIL in blue; BAG2 in pale yellow; linker in black). Only the Fv portion of BAG2 is displayed.



**Figure 3.** Cryo-EM maps and structures of masked NorA-BRIL<sup>3A</sup> at pH 5. (a) Cryo-EM maps of masked NorA-BRIL at pH 5.0 in inward-open (left), inward-occluded (middle), and occluded conformations (right), with map resolutions of 3.21 Å, 3.18 Å, and 3.25 Å, respectively. Maps were colored by the N-terminal domain of NorA (TM1 to TM6; in dark grey), C-terminal domain of NorA (TM7 to TM12; in light grey), alanine linker (in black), and BRIL (in blue). (b) Structures of NorA in the inward-open (left), inward-occluded (middle), and occluded (right) conformations, where NorA is displayed in a ribbon representation (TM helices in rainbow). Side views were depicted in the same orientation as the maps.

