

**Figure S1. pFNsfEG vector for FSEC.** (A) Map of pFNsfEG. (B) Work-flow for FSEC using pFNsfEG.

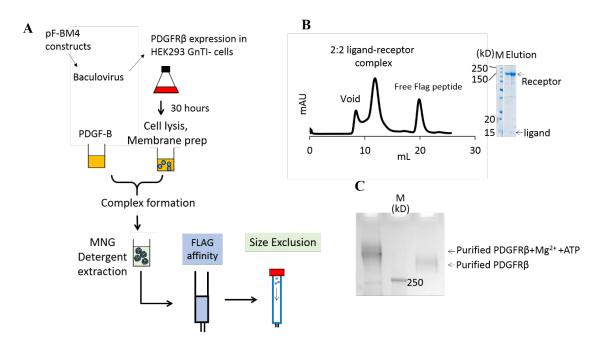


Figure S2. Purification of PDGF-B/PDGFRβ complex in detergent. (A) Workflow for complex purification. (B) Gel-filtration profile and SDS-PAGE of purified complex. (C) Purified receptor vs purified receptor+ATP+Magnesium.

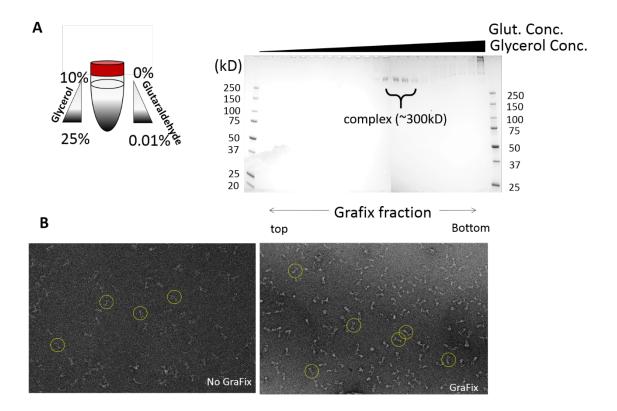
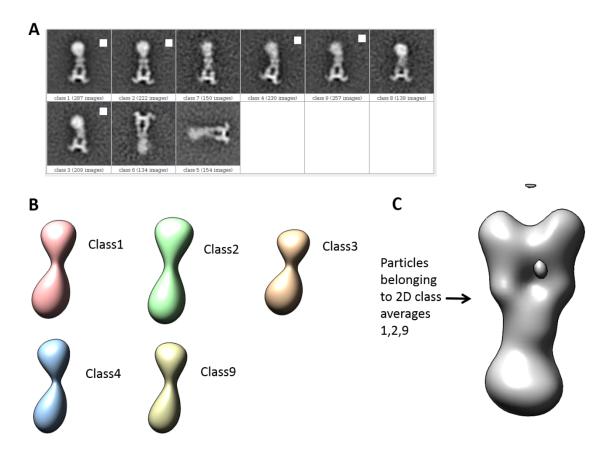
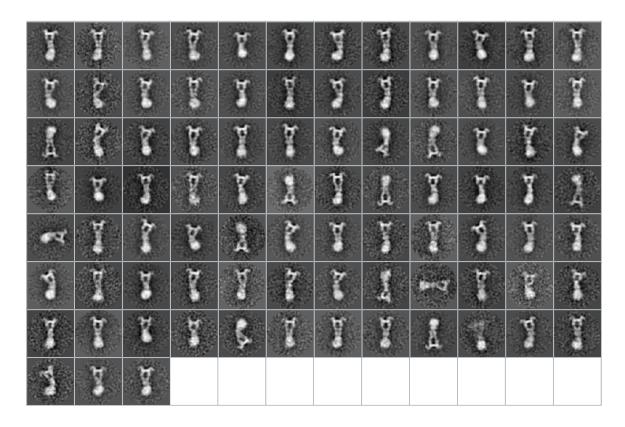


Figure S3. GraFix purification of PDGF-B/PDGFRβ complex. (A) Gradient setup (left). SDS-PAGE of GraFix fractions (right). (B) Micrographs from samples without GraFix (left) versus with GraFix (right) treatment.

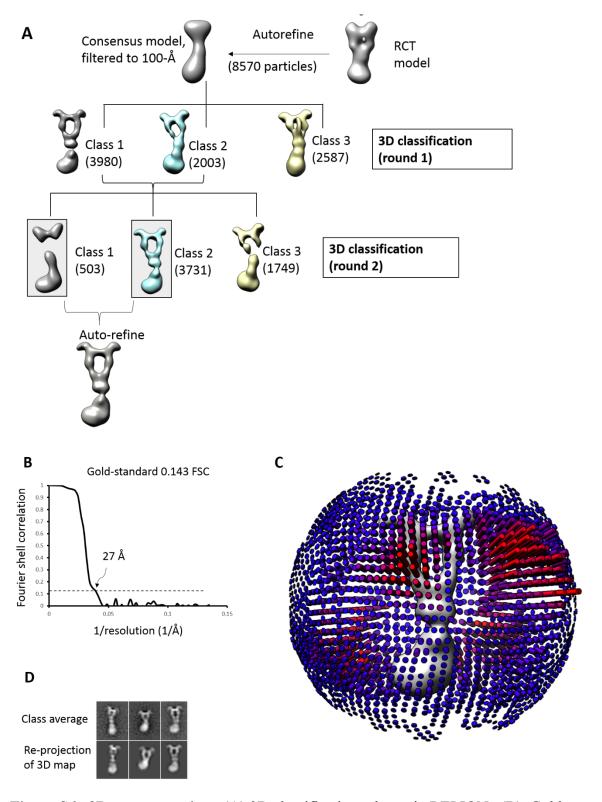


**Figure S4. Random conical tilt reconstruction.** (A) Classes used for reconstruction are marked with white squares. (B) Initial models. (C) Model from combined classes 1, 2, and 9.



2D class average, 87 classes

Figure S5. 2D class averages after data cleaning.



**Figure S6. 3D reconstruction.** (A) 3D classification scheme in RELION. (B) Goldstandard 0.143 criterion for resolution estimate. (C) Angular distribution shown in 3D,

with the height of a bar proportional to the number of observations from that angle. (D) Class averages versus back-projections from 3D map.