Motivating Question:
What are the minimum plausible masses of Neptune-size (2-6 $R_\oplus$) planets?

Planets with gas layers can get larger as you go to lower planet masses.
Main Results

Equilibrium Planet Models:
Neptune-size *Kepler* planet candidates could have low mass (a few Earth masses at $T_{eq}=500K$).

Core Nucleated Accretion Calculations:
Low mass (3-8 M⊕) Planets with substantial H/He envelopes can plausibly form by core nucleated accretion beyond the snow-line and migrate inward to $T_{eq} \sim 500K$ with their envelopes intact.

Dissociative Outgassing of H$_2$:
Planets with outgassed H$_2$ envelopes typically have modeled radii less than 3 R⊕.

See also arXiv:1106.2807