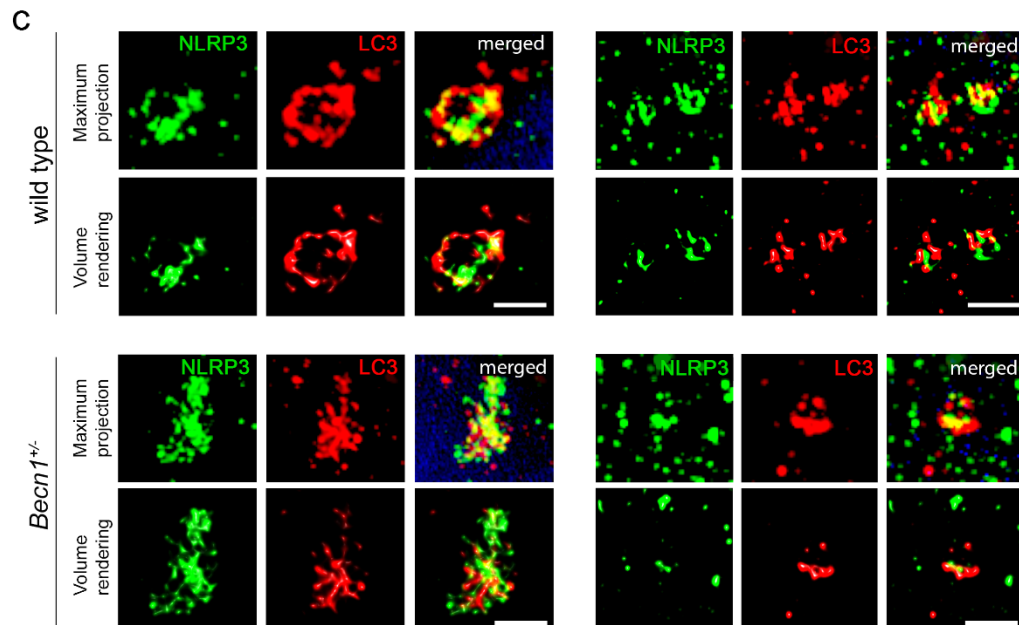
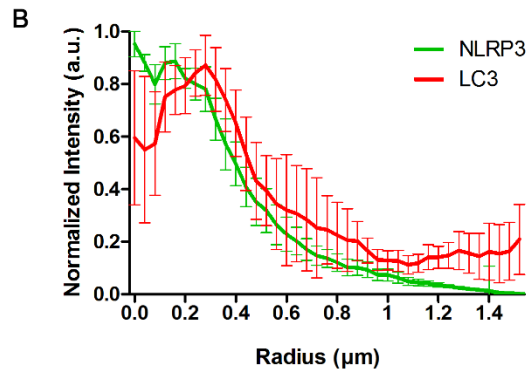
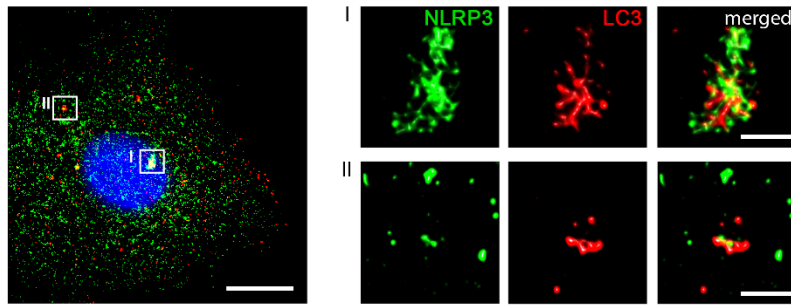


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Appendix Figure S1

A *Becn1*^{+/-} LPS/ATP



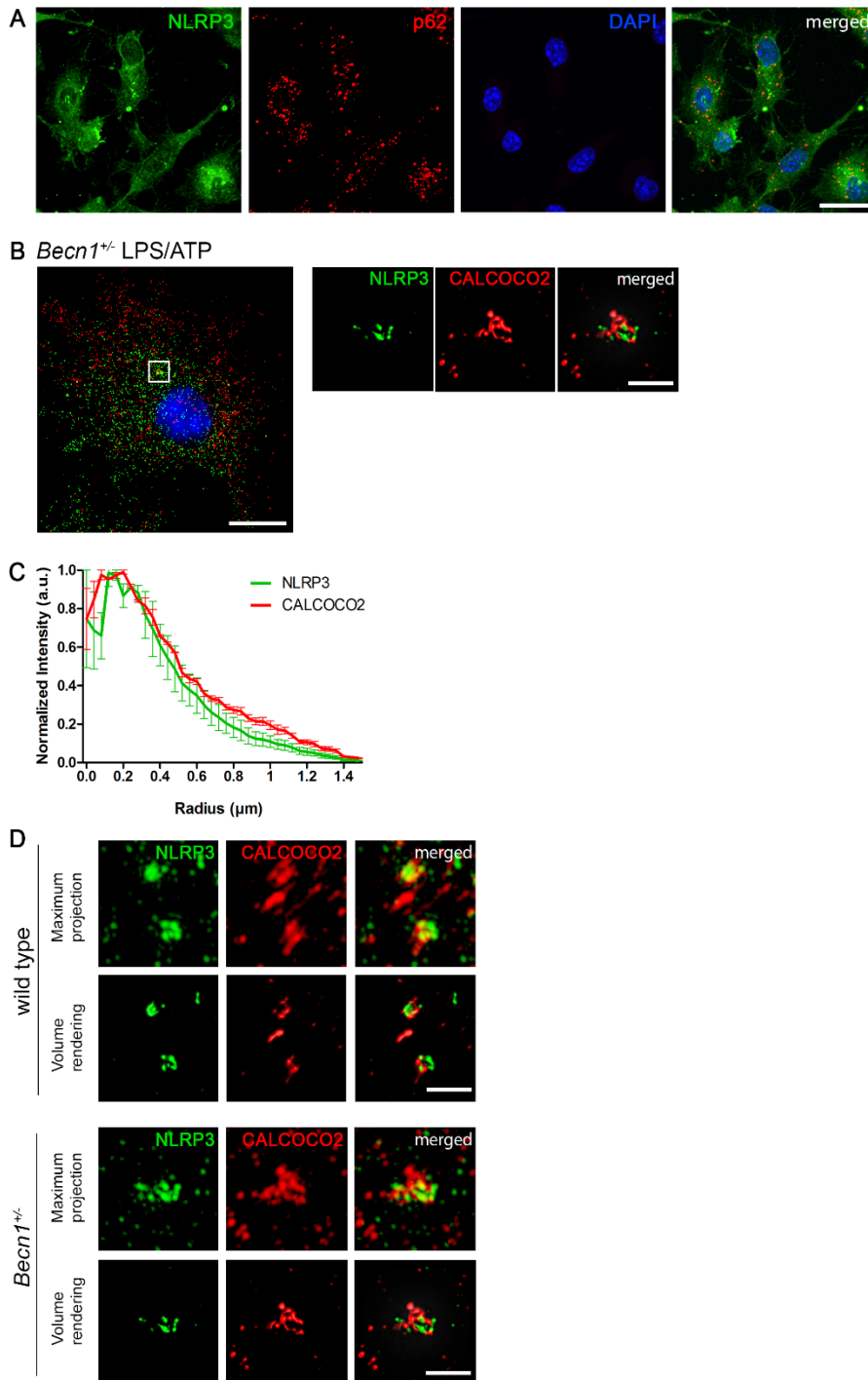
Appendix Figure S1.

(A) LPS/ATP treated *Becn1*^{+/-} microglia were stained for NLRP3 (green) and LC3 (red) and analysed by super resolution microscopy (SIM). LC3-positive autophagosomes clustering around NLRP3 aggregates of different sizes are visible. 3D volume rendering of large (I) and small (II) NLRP3 aggregates in the magnified ROIs showed indeed engulfment of NLRP3 by autophagosomes; scale bar: 10 µm; magnified ROIs: 1 µm.

(B) 3D Radial intensity profiles of NLRP3 and LC3 signals in *Becn1*^{+/-} microglia centered on the maxima of NLRP3 clusters. Radial profiles show that both proteins colocalize, n = 3.

(C) Maximum projection of the ROIs used for the volume rendering shown in Fig 4B (wild type) and Fig EV5A (*Becn1*^{+/-}); scale bar: 1 µm.

Appendix Figure S2



Appendix Figure S2.

(A) LPS/ATP treated wild type microglia were stained for NLRP3 (green) and p62/SQSTM1 (red) and analysed by confocal microscopy. No colocalization of the two proteins became apparent; scale bar: 20 μm .

(B) LPS/ATP treated *Becn1*^{+/-} microglia were stained for NLRP3 (green) and CALCOCO2 (red) and analysed by super resolution microscopy (SIM). NLRP3 aggregates of different sizes coclustering with CALCOCO2-positive signals are visible. 3D volume rendering of a NLRP3 aggregate from the magnified ROI showed close contact of NLRP3 with the autophagic receptor; scale bar: 10 μm ; magnified ROI: 1 μm .

(C) 3D Radial intensity profiles of NLRP3 and CALCOCO2 signals derived from SIM images in *Becn1*^{+/-} microglia, centered on the maxima of NLRP3 clusters. The radial profiles confirm that both proteins colocalize, $n = 2$.

(D) Maximum projection of the ROIs used for the volume rendering shown in Fig 5B (wild type) and Fig EV5B (*Becn1*^{+/-}); scale bar: 1 μm .