Figure S1: Intracellular localization of PTP-PEST in response to hypoxia and equal pull down of PTP-PEST following immunoprecipitation. (A) Representative confocal immunofluorescence images demonstrating cytoplasmic retention of PTP-PEST in response to 3 or 24 h of hypoxia (1% O₂) for 3 independent experiments, wherein, each experiment was performed with a fresh batch of HUVECs (scale bar: 10 µm). (B) Bar graph summarizing as mean ± S.E.M for 3 independent experiments, equal pull down of PTP-PEST following immunoprecipitation for the immunophosphatase assays performed and represented in Fig.1D. Densitometry analysis was performed using ImageJ software and PTP-PEST immunoprecipitation was normalized to normoxia.
Figure S2: Confirmation of purification of bacterially expressed wild type and mutant PTP-PEST. (A) SDS-PAGE image confirming purification of His-tagged WT and C231S mutant of PTP-PEST (1-300 amino acids) through Ni²⁺-NTA based IMAC. (B) Chromatogram of size exclusion chromatography of purified His-tagged WT PTP-PEST (1-300 amino acids). (C) Chromatogram of size exclusion chromatography of purified His-tagged C231S mutant of PTP-PEST (1-300 amino acids). These chromatograms confirm monomeric state of purified PTP-PEST proteins. (D) Bar graph summarizing fold change in Thr¹⁷² AMPK phosphorylation to total AMPK levels measured through densitometry as mean ± S.E.M, relative to normoxia treatment as a measurement of activation of AMPK in response to hypoxia for 5 independent experiments. *p<0.05, **p<0.01, ***p<0.001 vs corresponding normoxia; two tailed Student's t-test.
Supplementary Figure 3

A

<table>
<thead>
<tr>
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<tr>
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<td>N 1 3 6 12 24</td>
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<tr>
<td>LC3 I</td>
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<tr>
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<tr>
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<tr>
<td>Ser^{317} ULK1</td>
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<td>Ser^{757} ULK1</td>
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<td>ULK1</td>
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<td>β-actin</td>
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B

Fold change in LC3 II / β-actin levels

C

Fold change in Beclin-1 / β-actin levels

D

Fold change in pULK1 Ser^{317} / total ULK1

E

Fold change in pULK1 Ser^{757} / total ULK1

G

- No. of beads per cell
- % of Chlamydia-positive cells

H

- Normoxia
- Hypoxia

F

- Normoxia
- Hypoxia
- Hypoxia+BafA1

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Figure S3: Hypoxia induces autophagy in HUVECs. (A) Representative Western blots depicting effect of hypoxia (1 % O₂) on autophagy as LC3 degradation, increase in beclin-1 expression, increase in ULK1 Ser^{317} phosphorylation and a decrease in ULK1 Ser^{757} phosphorylation. (B-E) Bar graphs summarizing data as mean ± S.E.M for fold change in LC3 degradation (n=4), beclin-1 expression (n=3), ULK1 Ser^{317} phosphorylation (n=3) and ULK1 Ser^{757} phosphorylation (n=3) relative to normoxia respectively. Densitometry analysis was performed using ImageJ software on mentioned number of independent experiments, wherein, each experiment was performed on a fresh batch of HUVECs. (F) Representative confocal immunofluorescence images demonstrating effect of hypoxia (1 % O₂) on LC3 puncta formation in presence or absence of bafilomycin A1 (scale bar: 10 µm). Immunostaining was performed using LC3 antibody in HUVECs. Bar graphs summarize data as mean ± S.E.M for number of puncta per cell (G) and as percent LC3 puncta positive cells (H) for 3 independent experiments. *p<0.05, **p<0.01, ***p<0.001 versus corresponding normoxia; two tailed Student's t-test.