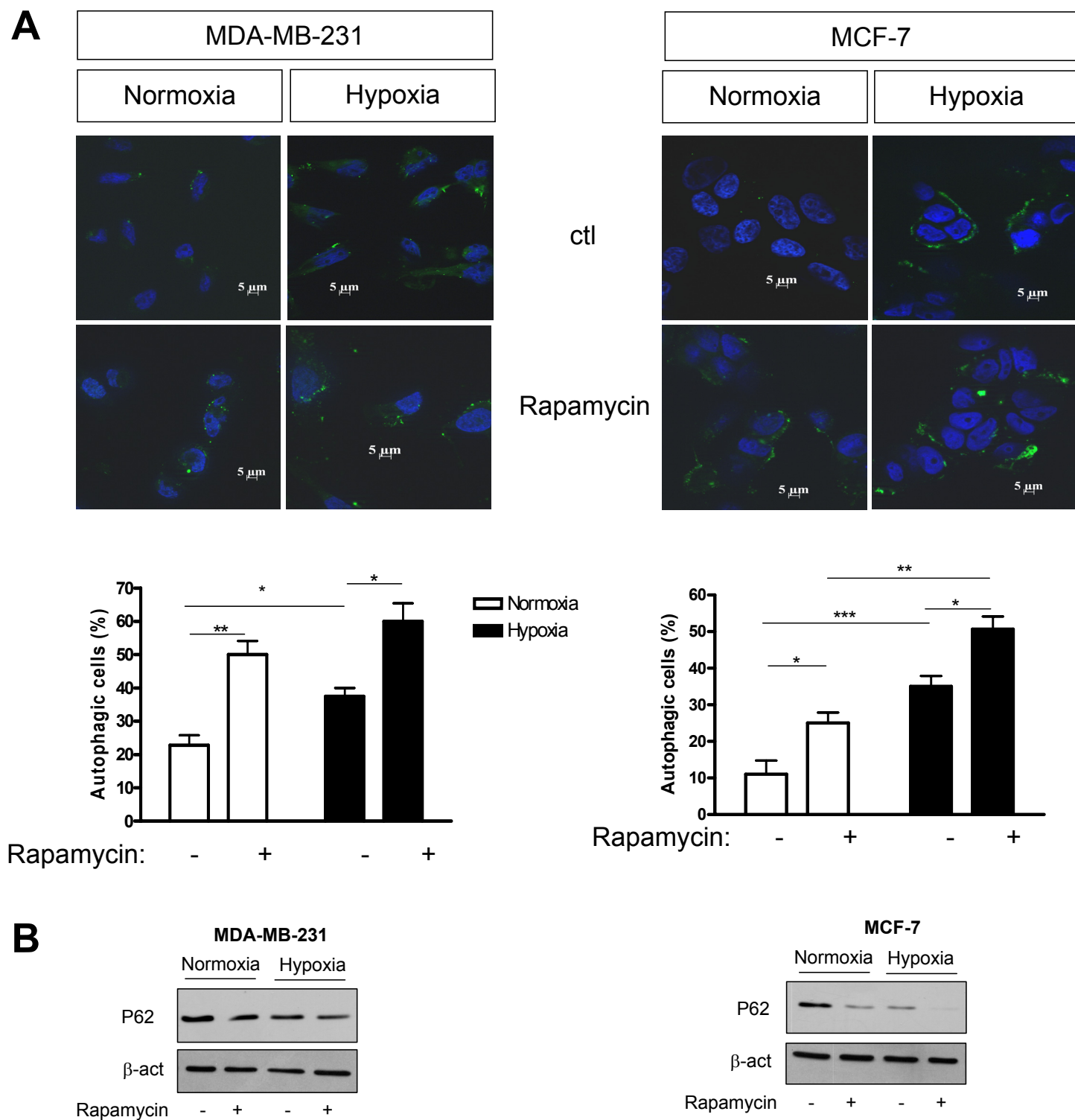


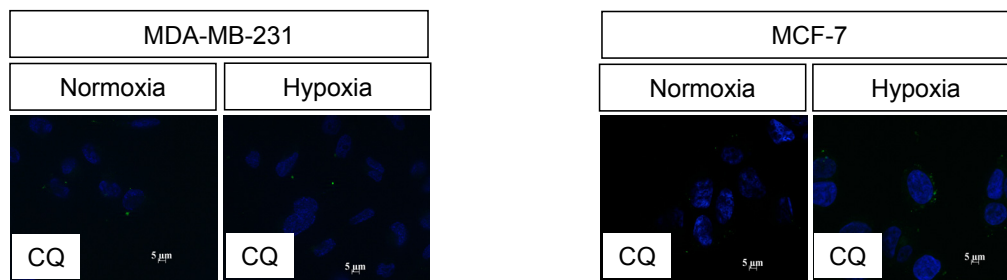
Supplementary Figure 1



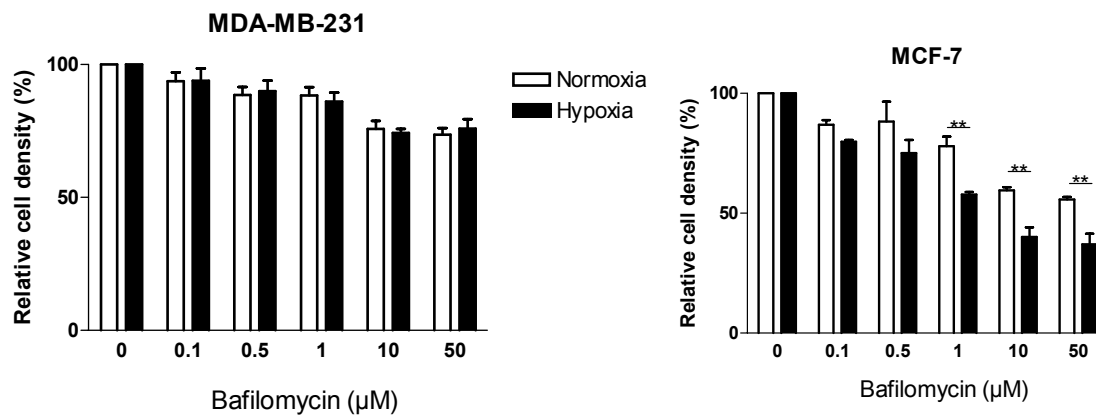
Supplementary Figure 1. Hypoxia stimulates autophagy in MCF-7 but not in MDA-MB-231 cells. (A) Representative immunofluorescence detection of the fluorogenic protease substrate DQ Green BSA to image the formation of the autolysosome (green staining) in MDA-MB-231 and MCF-7 cells after 48h-treatment with 100 nM rapamycin under normoxia or hypoxia. Bar graphs represent the proportion of autophagic cells (%) (* $p < 0.05$, ** $p < 0.01$, $n = 3$). (B) Representative p62 immunoblotting experiments ($n = 3$) are presented for MDA-MB-231 and MCF-7 cells exposed for 48 hours to normoxia or hypoxia in the presence of 100 nM rapamycin; the reduction in p62 immunoblotting signal reflects autophagic degradation of p62.

Supplementary Figure 2

A.

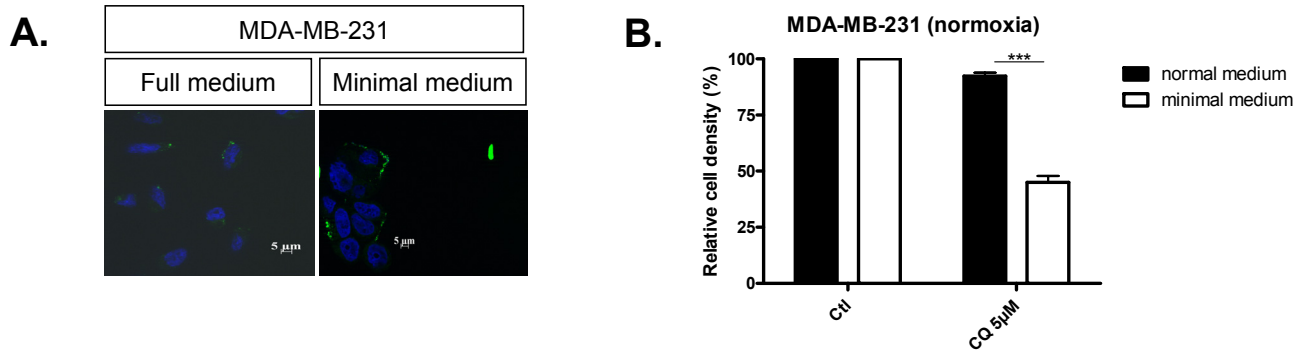


B.



Supplementary Figure 2. Effects of the autophagy inhibitors chloroquin and bafilomycin (A) Representative immunofluorescence detection of the fluorogenic protease substrate DQ Green BSA to image the formation of the autolysosome (green staining) in MDA-MB-231 and MCF-7 cells after 48h-treatment with 5 μM CQ under normoxia or hypoxia; see untreated conditions in Suppl. Figure 1A. **(B)** Bar graphs represent the extent of MDA-MB-231 and MCF-7 cell proliferation (expressed as % of untreated cells) after 48 h-treatment with increasing concentrations of bafilomycin (** p<0.01, n= 3). Note that bafilomycin reduces the proliferation of hypoxic MCF-7 cells but not that of MDA-MB231 cells.

Supplementary Figure 3



Supplementary Figure 3. Autophagy can be induced in MDA-MB-231 cells in response to the exposure to minimal medium (A) Representative immunofluorescence detection of the fluorogenic protease substrate DQ Green BSA to image the formation of the autolysosome (green staining) in MDA-MB-231 cells after 48 h-exposure to amino acid-deprived medium (minimal medium) under normoxia. **(B)** Bar graph represents the extent of MDA-MB-231 cell proliferation (expressed as % of untreated cells) after 48 h-exposure to amino acid-deprived medium (minimal medium) with or without chloroquin (***) $p < 0.001$, $n = 3$).