Figure 3  Glucose deprivation response phenotype in lapatinib resistance.  (A) Immunoblotting of key members of glucose deprivation response in parental and resistant cells HSPA5, HK2, IRE1, pJNK, pAMPK, PERK and p38.  (B) Immunoblotting of the AKT and AMPK phosphorylation sites on TSC2 in parental and resistant cells.  (C) Glucose uptake flux analysis (\*P < 0.05),  (D) lactate production flux analysis (\*P < 0.05),  (E) ratio of lactate to glucose (\*P < 0.05) and  (F) total ATP content of parental and resistant cells after 24 h of lapatinib treatment (\*P < 0.01).  (G) Change in cell numbers of parental SKBR3 cells treated with increasing doses of lapatinib in a media with normal and no glucose (\*P < 0.01).  (H) Change in cell numbers of BT474 cells treated with increasing doses of lapatinib after prolonged incubation in a media with normal (2 g/l) and low (0.25 g/l) glucose (\*P < 0.01).