



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 ($*P < 0.01$).