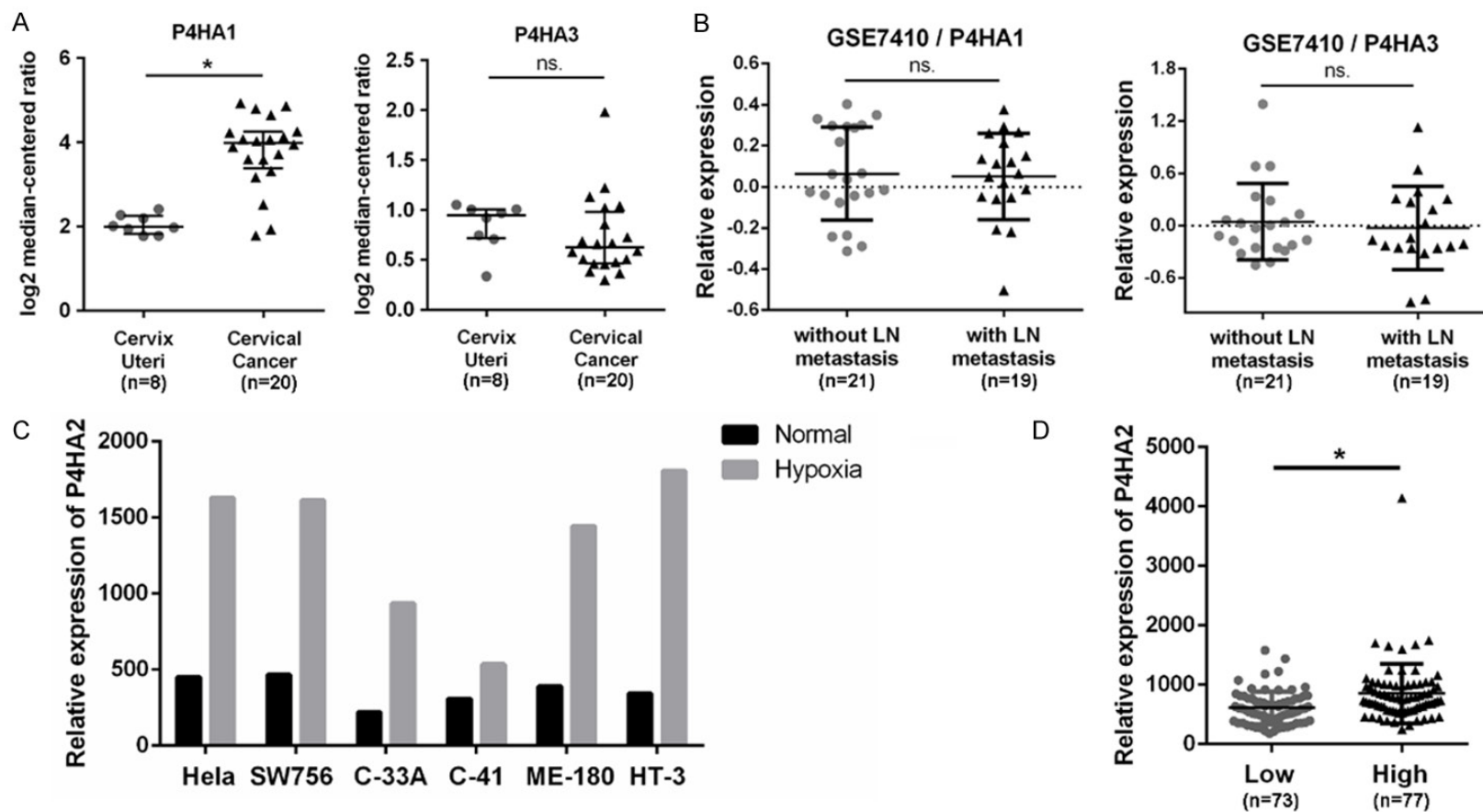
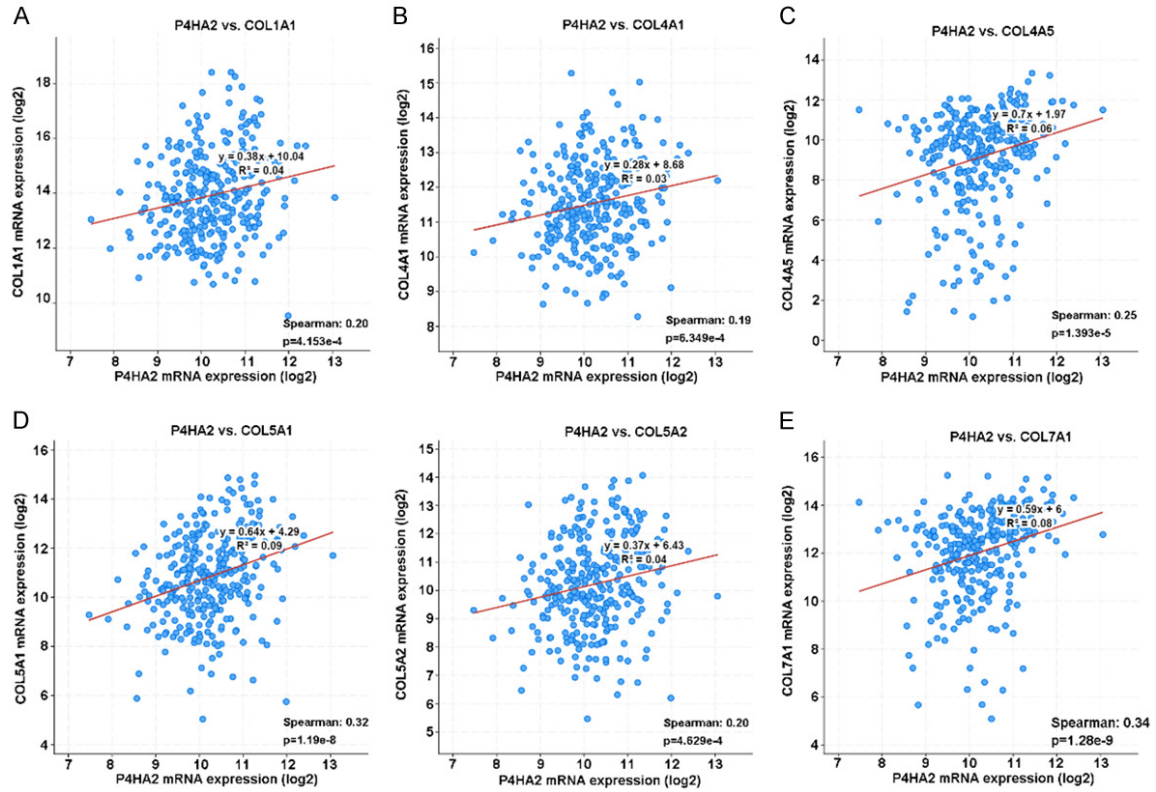


P4HA2 regulates glycolysis in cervical cancer

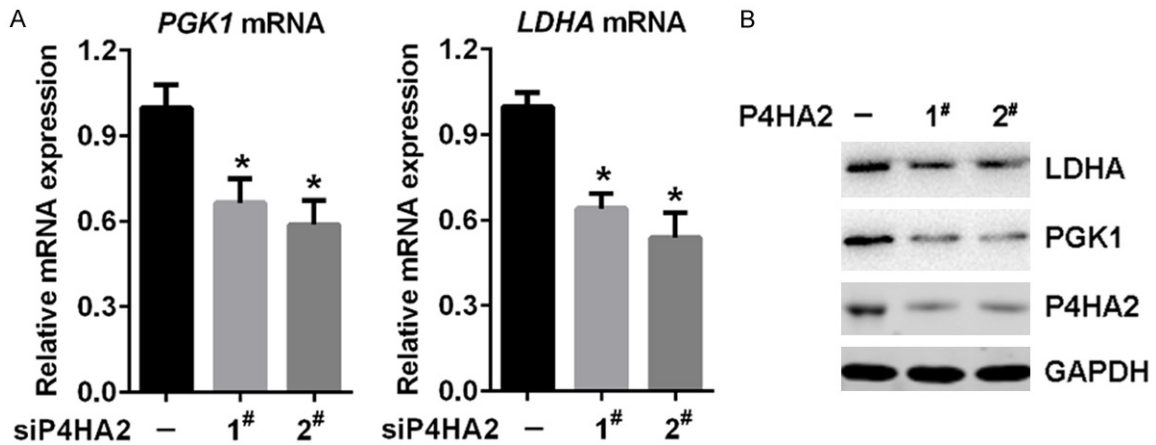


**Figure S1.** P4HA2 expression is elevated in hypoxic condition. **A.** Expressions of P4HA1 and P4HA3 in normal cervix and cervical cancer from GSE6791 dataset available at Oncomine (<https://www.oncomine.org/>), \* $P < 0.05$ . **B.** P4HA1 and P4HA3 mRNA expression in cervical cancer with and without lymph node metastasis from GSE7410 dataset. **C.** P4HA2 mRNA expression in hypoxic condition and normal condition of cervical cancer cell lines from GSE75034 dataset. **D.** P4HA2 mRNA expression in cervical cancer patients with high and low degree of hypoxia score, \* $P < 0.05$ . LN, lymph node; ns, not significant.

## P4HA2 regulates glycolysis in cervical cancer



**Figure S2.** Association of P4HA2 expression with collagen deposition related genes. Positive correlation of P4HA2 expression with Col1A1 ( $R^2=0.04$ ,  $P=4.153e-4$ ), Col4A1 ( $R^2=0.03$ ,  $P=6.394e-4$ ), Col4A5 ( $R^2=0.06$ ,  $P=1.393e-5$ ), Col5A1 ( $R^2=0.09$ ,  $P=1.19e-8$ ), Col5A2 ( $R^2=0.04$ ,  $P=4.629e-4$ ) and Col7A1 ( $R^2=0.08$ ,  $P=1.28e-9$ ) expressions based on TCGA database.



**Figure S3.** P4HA2 promotes glycolysis through PGK1 and LDHA. A. PGK1 and LDHA mRNA expression in SiHa cells treated with siP4HA2-1# and siP4HA2-2#,  $*P < 0.05$  versus siNC group. B. PGK1 and LDHA protein levels in HeLa cells treated with siP4HA2-1# and siP4HA2-2#.