



**S6 Fig.** Immunohistochemical validation of genetic alteration and biomarkers. (A) Phospho-mTOR positivity (cytoplasmic, heterogenous). (B) Phospho-p44/42 MAPK positivity (nuclear/cytoplasmic). (C)  $\beta$ -catenin cytoplasmic expressions (not nuclear; loss of membranous expression) of (D) CHD4 positivity (nuclear/cytoplasmic) (A-D,  $\times 200$ ).