

Table SI. Antibodies used for immunohistochemistry in this study.

Antigen	Clone (supplier, catalog number)	Dilution	Host	Type
ARID1A	Anti ARID1A (Atlas Antibodies AB, HPA005456)	1:500	Rabbit	Polyclonal
SMARCA2	Anti-SMARCA2/BRM antibody (Abcam, ab15597)	1:50	Rabbit	Polyclonal
SMARCA4	G-7 (Santa Cruz Biotechnology, Inc., sc-17796)	1:25	Mouse	Monoclonal
SMARCB1	25/BAF47 (BD Transduction Laboratories; BD Biosciences, 612110)	1:250	Mouse	Monoclonal
SMARCC2	E-6 (Santa Cruz Biotechnology, Inc., sc-17838)	1:100	Mouse	Monoclonal
CHD4	3F2/4 (Abcam, ab70469)	1:800	Mouse	Monoclonal
ACTL6A	E-3 (Santa Cruz Biotechnology, Inc., sc-137062)	1:2,000	Mouse	Monoclonal
H3K27me3	C36B11 (Cell Signaling Technology, Inc., 9733)	1:200	Rabbit	Monoclonal
P53	DO-7 (Novocastra;Leica Microsystems, Inc.,NCL-L-p53-DO7)	1:100	Mouse	Monoclonal

CHD4, chromodomain helicase DNA binding protein 4; ACTL6A, actin-like protein 6A; H3K27me3, tri-methylation of lysine 27 of histone H3; ARID1A, AT-rich interaction domain 1A; SMARC, SWI/SNF related, matrix associated, actin dependent regulator of chromatin; SMARCA, SMARC subfamily a; SMARCB subfamily b; SMARCC, SMARC subfamily c.