Supplemental Digital Content 2.

Table of antibodies and protocols used for immunohistochemistry.

Antibody	Supplier	Catalogue #	Host	Clone	Staining Platform	Detection System	Antigen Retrieval	1° Antibody	2° Antibody
HNF1B	Sigma-Aldrich	HPA002083	Rabbit	Polyclonal	Ventana Discovery Ultra	DAB Map	CC1, 64 min	1:250, 1 hr, 37C	Universal Secondary, 32 min
P16	Ventana	705-4713	Mouse	E6H4	Ventana Discovery Ultra	ChromoMap DAB	CC1, 64 min	neat, 20 min, 36C	UltraMap anti-Ms HRP, 16 min
P53	Dako	M7001	Mouse	DO-7	Ventana Discovery Ultra	DAB Map	CC1, 64 min	1:400, 1 hr, 37C	Universal Secondary, 32 min
PR	Ventana	790-2223	Rabbit	1E2	Ventana Discovery Ultra	DAB Map	CC1, 64 min	neat, 16 min, 36C	Universal Secondary, 32 min
TFF3	Abnova	H00007033-M01	Mouse	3D9	Ventana Discovery XT	DAB Map	CC2, Standard	1:50, 1 hr, heat	Universal Secondary, 32 min
Vimentin	Zymed	18-0052	Mouse	V9	Ventana Discovery XT	DAB Map	CC2, Mild	1:50, 32 min, heat	Universal Secondary, 32 min
WT1	Dako	M3561	Mouse	6F-H2	Ventana Discovery Ultra	DAB Map	CC1, 64 min	1:50, 1 hr, 37C	Universal Secondary, 32 min
ARID1A	Sigma-Aldrich	HPA005456	Rabbit	Polyclonal	Ventana Discovery Ultra	ChromoMap DAB	CC1, 64 min	1:100, 1 hr, no heat	UltraMap anti-Rb HRP, 16 min

Abbreviations:

CC1, Ventana Cell Conditioning 1 (EDTA/EGTA based)

CC2, Ventana Cell Conditioning 2 (Citrate based)

“Standard” and “Mild” refer to pre-programmed antigen retrieval steps available on the Ventana Discovery XT platform

Rb, Rabbit

Ms, Mouse

HRP, horseradish peroxidase (conjugated secondary antibody)

ARID1A, HNF1B, WT1 and PR were stained as positive or negative using a cutoff of 40% of cells staining with nuclear positivity at any intensity.

Vimentin and TFF3 were stained as positive or negative using a cutoff of 40% of cells staining with cytoplasmic and/or nuclear positivity at any intensity.

p16 (CDKN2A) positive staining was defined as 75% of tumor cells showing strong cytoplasmic and nuclear staining.

p53 (TP53) was scored on a three-tiered system. Score 0, showing a complete absence of staining in any tumor cells; score 1 showing from 1-60% positive nuclear staining of tumor cells; score 3; showing greater than 60% nuclear staining of tumor cells with most nuclei at high intensity positivity.