

Appendix S1

Haematoxylin and eosin staining protocol of the renal biopsy.

The renal tissue biopsy fragment was fixed in alcoholic Bouin's solution for 5 h at room temperature. The sample was then dehydrated in increasing alcohol concentrations, cleared in xylene and embedded in paraffin. Subsequently, serial sections (3 μ m) were obtained from paraffin-embedded renal tissue blocks using a microtome, and each section was cleared in xylene and rehydrated in decreasing concentrations of alcohol. The sections were then submerged in haematoxylin solution for 3 min at room temperature and washed in running water, followed by immersion in acid-alcohol solution (1% HCl in 70% alcohol) for 1-2 sec at room temperature and washed in running water, then in ammonia solution for 30 sec at room temperature and washed in running water, and finally in eosin solution for 1 min at room temperature. The sections were then dehydrated in increasing concentrations of alcohol, cleared with xylene and mounted on histological slides. A light microscope (Axio Scope.A1; cat. no. 430035-9120-000; Carl Zeiss AG) was used to detect staining.

Immunohistochemistry. Serial sections (3 μ m) were obtained from paraffin-embedded renal tissue blocks using a microtome. For immunohistochemistry of formalin-fixed (fixation in 10% neutral-buffered formalin for 12 h at room temperature) tissues, the following primary antibodies were used: Anti-cytokeratin (CK)7 (cat. no. NCL-L-CK7-OVTL; Leica Biosystems), anti-CK19 (cat. no. NCL-L-CK19; Leica Biosystems), anti-paired box gene 8 (PAX8; cat. no. API-438-H; Biocare Medical, LLC), anti-transcription factor E3 (TFE3; cat. no. SAB4200824; MilliporeSigma) and anti-integrase interactor 1 (INI1; cat. no. 272M-16; MilliporeSigma). For immunohistochemistry of Bouin's-fixed (fixation in alcoholic Bouin's solution

for 5 h at room temperature) tissues, the following antibodies were used: Anti-CK7, anti-CK AE1/AE3 (cat. no. NCL-L-AE1/AE3; Leica Biosystems), anti-CD10 (cat. no. NCL-L-CD10-270; Leica Biosystems), anti-CK20 (cat. no. NCL-L-CK20; Leica Biosystems), anti-PAX8, anti-CD117 (cat. no. NCL-L-CD117-032; Leica Biosystems), anti-HMB45 (cat. no. NCL-L-HMB45; Leica Biosystems), anti-Melan A (cat. no. NCL-L-MELANA; Leica Biosystems), anti-TFE3, anti-CD3 (cat. no. 103A-77; MilliporeSigma), anti-CD20 (cat. no. NCL-L-CD20-L26; Leica Biosystems), anti-CD30 (cat. no. NCL-L-CD30-591; Leica Biosystems), anti-desmin (cat. no. NCL-L-DES-DERII; Leica Biosystems); anti-protein S100 (cat. no. NCL-L-S100p; Leica Biosystems), anti-CD31 (cat. no. NCL-CD31-1A10; Leica Biosystems) and anti-INI1. The sections were pretreated with Trilogy[®] solution (cat. no. 922P-0; Cell Marque; MilliporeSigma) in a pressure cooker for 15 min at 121°C (Dako; Agilent Technologies, Inc.) for deparaffinization, rehydration and antigen retrieval. The sections were then incubated in a humidified dark chamber with a peroxidase blocker (Peroxidase Block; Novolink Polymer Detection System Kit; cat. no. RE7280-CE; Leica Biosystems) for 30 min at 25°C, followed by treatment with a protein blocker (Protein Block; Novolink Polymer Detection System Kit) for 30 min at 25°C. Subsequently, the primary antibodies were diluted at a 1:50 ratio and were incubated with the sections for 30 min at 25°C. The secondary antibodies (Post Primary, cat. no. RE7280-K; Leica Biosystems) were diluted at a 1:100 ratio and incubated with the sections for 30 min at 37°C, followed by incubation with the polymer reagent (Novolink Polymer Detection System Kit) for 30 min at room temperature. Subsequently, the sections were incubated with the chromogen diaminobenzidine (cat. no. RES2041D; MilliporeSigma) for 5 min at 37°C and stained with Harris haematoxylin. A light microscope (Axio Scope.A1) was used to detect staining.