

# KIDNEY CANCER FOCUS

There are different types of kidney cancer. Renal cell carcinoma (RCC) is the most common one. RCC shows resistance to radiation or chemotherapy. Thus, surgery is the most effective treatment method. Renal cell carcinoma accounts for 2-3% of all cancers, with the highest incidence occurring in Western countries.

# **APOL1:** Its new role in kidney diseases

Alterations in ApolipoproteinL (ApoL1) functions lead to different lipid disorders. Several current studies show that the ApoL1 protein is involved in different kidney diseases. 1,2,3,4



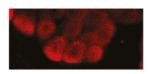
Immunohistochemical staining of paraffin-embedded human kidney tissue using APOL1 antibody (11486-2-AP) at a dilution of 1:50 (40x objective).

### **Related Antibodies**

Antibody Name	Cat No	Туре
APOL1	66124-1-lg	Mouse Mono
APOL1	5 11486-2-AP	Rabbit Poly
APOL1	1 KE00047	ELISA Kit

# **SIX2:** Investigating kidney development

It has previously been shown that SIX2 is expressed in developing mesenchymal tissue including renal differentiation. SIX2 also significantly marks renal progenitor cells, and is therefore a powerfool tool to distinguish between the ureteric bud (UB) and the nephrogenic "cap" mesenchyme (CM).<sup>5</sup>



Immunofluorescence staining using SIX2 antibody (11562-1-AP) of mouse embryonic kidney rudiment dissected at E13.5 and cultured for 2 days by Dr. Aleksandra Rak-Raszewska.

#### **Related Antibodies**

Antibody Name	Cat No	Туре
SIX2	64 11562-1-AP	Rabbit Poly



## **CA9**:

A marker for diagnosis, prognosis, and treatment

Carbonic anhydrase 9 (CA9) is a transmembrane member of the carbonic anhydrase family. CA9 is a marker specific for renal cell carcinoma. It has been shown that CA9 is not expressed in healthy renal tissue but is expressed in most clear cell renal cell carcinomas.<sup>6,7</sup>



Immunohistochemical staining of paraffin-embedded human renal cell carcinoma tissue using CA9 antibody (66243-1-IG) at a dilution of 1:400 (40x objective). Heat-mediated antigen retrieved with Tris-EDTA buffer (PH9).

#### **Related Antibodies**

Antibody Name	Cat No	Туре
CA9	5 66243-1-lg	Mouse Mono

### More Kidneyrelated Antibodies From Proteintech

Antibody Name	Cat No	Туре
CA2	2 16961-1-AP	Rabbit Poly
Calbindin	14479-1-AP	Rabbit Poly
GSTT1	5 15838-1-AP	Rabbit Poly
NKCC2	18970-1-AP	Rabbit Poly
PDK1	18262-1-AP	Rabbit Poly
Renin	14291-1-AP	Rabbit Poly
Synaptopodin	21064-1-AP	Rabbit Poly
VEGF	19003-1-AP	Rabbit Poly



This number shows the amount of times our antibody has been cited in a publication.

#### References

- <sup>1</sup> Tzur S, et al. Human Genetics, 2010; 128: 345–50.
- <sup>2</sup> Behar D, et al. Am J Kidney Dis, 2006; 47: 88–94.
- 3 Lan X, et al. Experimental and Molecular Pathology 2015; 98: 491–501.
- <sup>4</sup> Hu C, et al. FEBS Lett. 2012; 586: 947–55.
- <sup>5</sup> Short K, et al. Developmental Cell, 2014; 29: 188–202.
- 6 Tostain J, et al. Eur J Cancer. 2010; 46: 3141-8
- <sup>7</sup> Soyupak B, et al. Urol Int. 2005; 74: 68–73.