

# IHC*easy* NOX4 Ready-To-Use IHC Kit

Catalog Number: **KHC1954**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Mouse, Rat  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Rabbit Polyclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

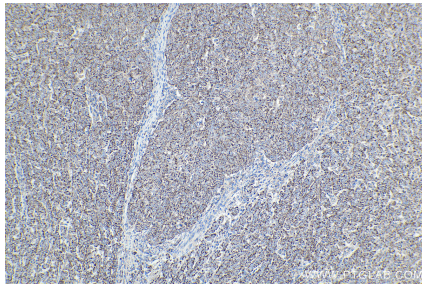
## Background

NOX4 (NADPH oxidase 4) is a phagocyte-type oxidase, similar to that responsible for the production of large amounts of reactive oxygen species (ROS) in neutrophil granulocytes with resultant antimicrobial activity and it has been postulated to function in the kidney as an oxygen sensor that regulates the synthesis of erythropoietin in the renal cortex. The truncated NOX4 splice variant D lacks the majority of the transmembrane domain and has been shown to produce higher levels of ROS and DNA damage compared to its prototype. NOX4D has previously been shown to localise to the nucleus and nucleolus in various cell types and is implicated in the generation of reactive oxygen species (ROS) and DNA damage.

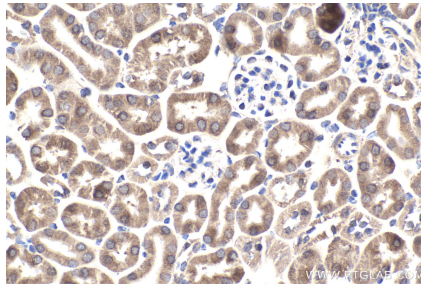
## Synonyms

Kidney oxidase 1, KOX, KOX 1, NADPH oxidase 4, NOX4, Renal NAD(P)H oxidase, RENOX

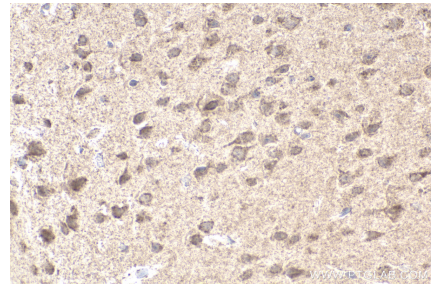
## Selected Validation Data



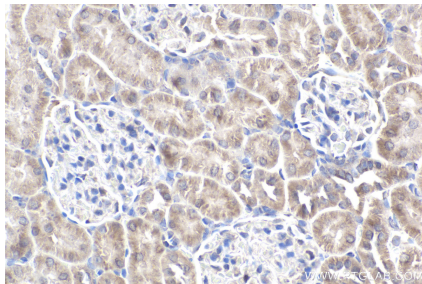
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using KHC1954 (NOX4 IHC Kit).



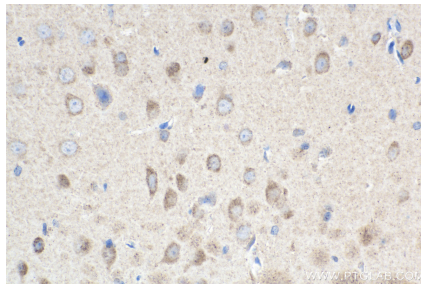
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using KHC1954 (NOX4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using KHC1954 (NOX4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using KHC1954 (NOX4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using KHC1954 (NOX4 IHC Kit).