

# IHCeasy CDC42EP4 Ready-To-Use IHC Kit

Catalog Number: **KHC2911**

## 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.

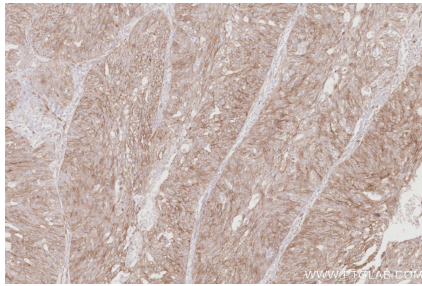
## Background

CDC42EP4, or Cell division cycle 42 effector protein 4, is a member of the CDC42-binding protein family. This protein interacts with Rho family GTPases and plays a role in regulating the organization of the actin cytoskeleton. It has been shown to bind both CDC42 and TC10 GTPases in a GTP-dependent manner. Overexpression of CDC42EP4 in fibroblasts can induce pseudopodia formation, suggesting its involvement in actin filament assembly and cell shape control. CDC42EP4 is also implicated in cancer progression, particularly in prostate cancer. Furthermore, CDC42EP4 has been implicated in the regulation of glutamate transporters, which are crucial for maintaining glutamate homeostasis in the nervous system. It has been suggested that CDC42EP4 may interact with septins, a family of polymerizing GTPases that constitute the membrane skeleton, and this interaction could potentially influence the localization and activity of glutamate transporters.

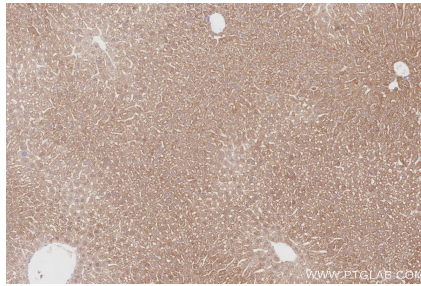
## Synonyms

Binder of Rho GTPases 4, BORG4, Cdc42 effector protein 4, CEP4

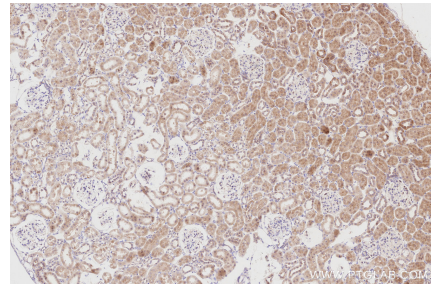
## Selected Validation Data



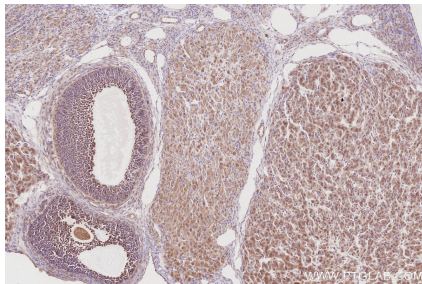
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using KHC2911 (CDC42EP4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using KHC2911 (CDC42EP4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using KHC2911 (CDC42EP4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat ovary tissue slide using KHC2911 (CDC42EP4 IHC Kit).