

# IHCeasy<sup>®</sup> MTOR Ready-To-Use IHC Kit

Catalog Number: **KHC2260**

## General Information

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

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Mouse Monoclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Mouse

## 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             |               |

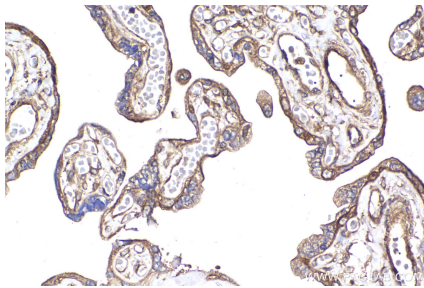
## Storage Instructions

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

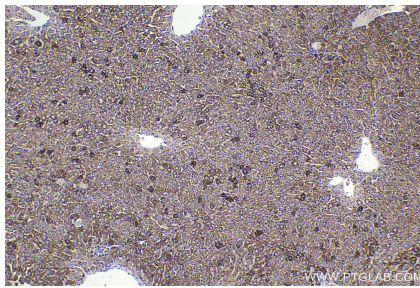
## Background

MTOR, also named as FRAP1, FRAP, FRAP2 and RAPT1, belongs to the PI3/PI4-kinase family. MTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. MTOR is kinase subunit of both mTORC1 and mTORC2, which regulate cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. mTORC2 is also activated by growth factors, but seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin.

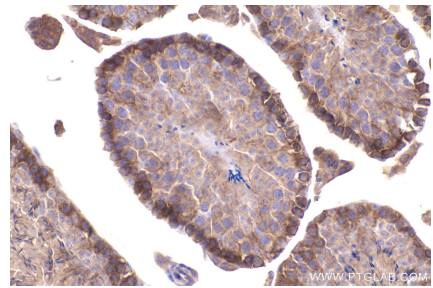
## Selected Validation Data



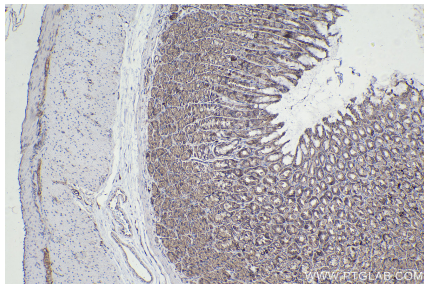
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using KHC2260 (MTOR IHC Kit).



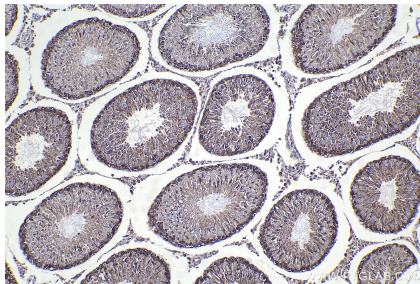
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using KHC2260 (MTOR IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using KHC2260 (MTOR IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using KHC2260 (MTOR IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat testis tissue slide using KHC2260 (MTOR IHC Kit).