



# IHCeasy LAMTOR1 Ready-To-Use IHC Kit

Catalog Number: KHC2577

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.

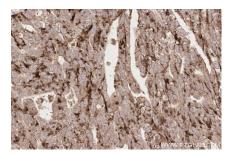
## Background

LAMTOR1 (Late Endosome/Lysosome-Associated Membrane Protein 1) is a membrane protein specifically localized to the surface of late endosomes/lysosomes and is involved in lysosomal transport and maturation. LAMTOR1 is a key component of the lysosomal articulating protein complex Ragulator, which is required for the localization of the Ragulator complex to lysosomes. LAMTOR1 is involved in autophagy, cell growth, immune regulation, cancer development, and regulatory pathways of glucose metabolism. Recent studies have shown that in calorie restriction, lithocholic acid activates AMPK through the glucose-sensing pathway (the lysosomal pathway) and the body senses the metabolic signals induced by calorie restriction and exerts its role in slowing down the effects of aging and prolonging the lifespan, whereas deletion of LAMTOR1 results in the inability of AMPK to be activated in order to play its role.

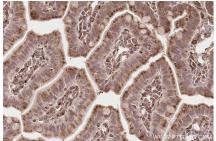
### Synonyms

C11orf59,LAMTOR1,Late endosomal/lysosomal adaptor

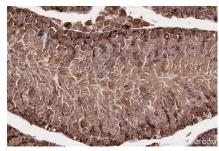
#### **Selected Validation Data**



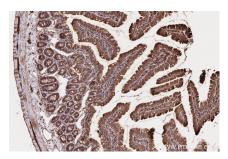
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using KHC2577 (LAMTOR1 IHC Kit).



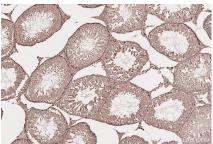
Immunohistochemical analysis of paraffinembedded mouse small intestine tissue slide using KHC2577 (LAMTOR1 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using KHC2577 (LAMTOR1 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat small intestine tissue slide using KHC2577 (LAMTOR1 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat testis tissue slide using KHC2577 (LAMTOR1 IHC Kit).