

## Anti-ULK3 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

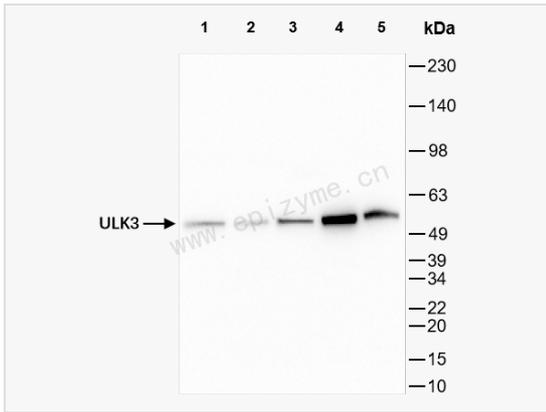
Catalog # R010822

### Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:3,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	41L97M82
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human ULK3
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-ULK3 Rabbit mAb [41L97M82] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	DKFZP434C131; FLJ90566; Serine/threonine-protein kinase ULK3; Ulk3; ULK3_HUMAN; unc 51 like kinase 3 (C. elegans); Unc-51-like kinase 3.
Calculated MW	Calculated MW: 53 kDa; Observed MW: 53 kDa
Uniprot ID	Q6PHR2
Gene ID	25989
Background	Serine/threonine protein kinase that acts as a regulator of Sonic hedgehog (SHH) signaling and autophagy. Acts as a negative regulator of SHH signaling in the absence of SHH ligand: interacts with SUFU, thereby inactivating the protein kinase activity and preventing phosphorylation of GLI proteins (GLI1, GLI2 and/or GLI3). Positively regulates SHH signaling in the presence of SHH: dissociates from SUFU, autophosphorylates and mediates phosphorylation of GLI2, activating it and promoting its nuclear translocation. Phosphorylates in vitro GLI2, as well as GLI1 and GLI3, although less efficiently. Also acts as a regulator of autophagy: following cellular senescence, able to induce autophagy.
Cellular Location	Cytoplasm.
Tissue Location	Widely expressed. Highest levels observed in fetal brain. In adult tissues, high levels in brain, liver and kidney, moderate levels in testis and adrenal gland and low levels in heart, lung, stomach, thymus, prostate and placenta. In the brain, highest expression in the hippocampus, high levels also detected in the cerebellum, olfactory bulb and optic nerve. In the central nervous system, lowest levels in the spinal cord.



Western Blot - Anti-ULK3 Rabbit mAb [41L97M82]

All lanes: R010822 at 1:3,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: 293T (Human embryonic kidney cell) whole cell lysates

Lane 5: K562 (Human chronic myeloid leukemia cell) whole cell lysates

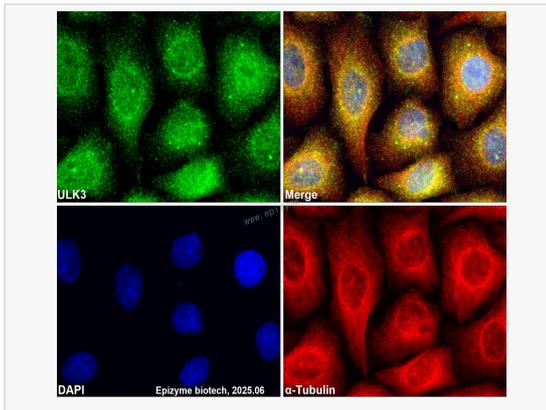
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 53 kDa

Observed band size: 53 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-ULK3 Rabbit mAb [41L97M82]

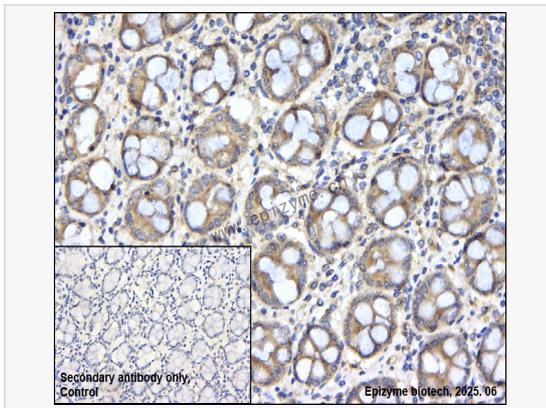
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R010822 at 1:100 dilution and  $\alpha$ -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-ULK3 Rabbit mAb [41L97M82]

Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

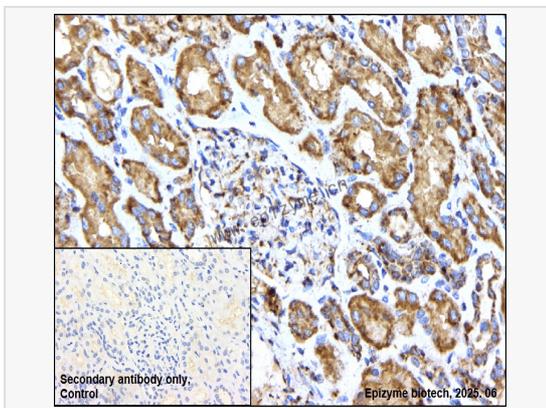
Primary antibody: R010822 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-ULK3 Rabbit mAb [41L97M82]

Sample: Paraformaldehyde-fixed, paraffin embedded human renal carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010822 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.