

# Anti-ULK3 Antibody

Rabbit polyclonal antibody to ULK3

Catalog # AP60523

## Product Information

Application	WB, IHC
Primary Accession	<a href="#">Q6PHR2</a>
Other Accession	<a href="#">Q3U3Q1</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53444

## Additional Information

Gene ID	25989
Other Names	Serine/threonine-protein kinase ULK3; Unc-51-like kinase 3
Target/Specificity	Recognizes endogenous levels of ULK3 protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

Name	ULK3
Function	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. Note=Localizes to pre-autophagosomal structure during cellular senescence

## 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

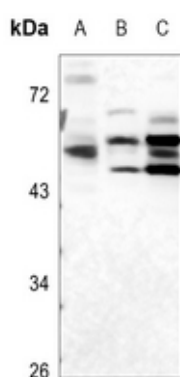
## Background

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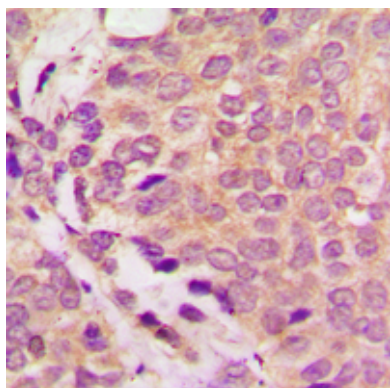
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ULK3. The exact sequence is proprietary.

## Images

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Western blot analysis of ULK3 expression in PC12 (A), COS7 (B), MCF7 (C) whole cell lysates.



Immunohistochemical analysis of ULK3 staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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