

Anti-ULK3 Antibody

Rabbit polyclonal antibody to ULK3 Catalog # AP60523

Specification

Anti-ULK3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC <u>Q6PHR2</u> <u>Q3U3Q1</u> Human, Mouse, Rat Rabbit Polyclonal 53444

Anti-ULK3 Antibody - 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), IH (1/100 - 1/200) IHC~~1:100~500

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

Anti-ULK3 Antibody - 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

Anti-ULK3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ULK3 Antibody - Images



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.

Anti-ULK3 Antibody - Background

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