

ULK3 Antibody (C-term)

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8437c

Specification

ULK3 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype WB, IHC-P,E <u>O6PHR2</u> Human, Mouse, Rat Mouse Monoclonal IgG1,k

ULK3 Antibody (C-term) - Additional Information

Gene ID 25989

Other Names Serine/threonine-protein kinase ULK3, Unc-51-like kinase 3, ULK3

Target/Specificity

This ULK3 antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 435-468 amino acids from the C-terminal region of human ULK3.

Dilution WB~~1:1000 IHC-P~~N/A E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions ULK3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ULK3 Antibody (C-term) - 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

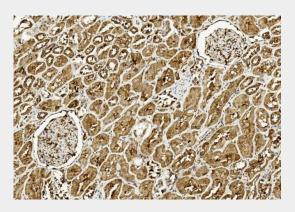
Widely expressed. Highest levels observed in fetal brain. In adult tissues, high levels in brain, liver and kidney, moderate levels in testis and adrenal gland and low levels in heart, lung, stomach, thymus, prostate and placenta. In the brain, highest expression in the hippocampus, high levels also detected in the cerebellum, olfactory bulb and optic nerve. In the central nervous system, lowest levels in the spinal cord

ULK3 Antibody (C-term) - Protocols

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

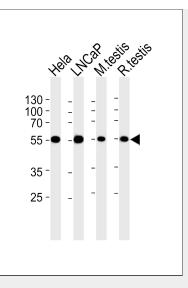
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ULK3 Antibody (C-term) - Images



Immunohistochemical analysis of paraffin-embedded Human kidney section using Pink1(Cat#am8437c). am8437c was diluted at 1:50 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.





Western blot analysis of lysates from Hela, LNCaP cell line, mouse testis and rat testis tissue lysates(from left to right), using ULK3 Antibody (C-term)(Cat. #AM8437c). AM8437c was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35µg per lane.

ULK3 Antibody (C-term) - 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.

ULK3 Antibody (C-term) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Zody M.C.,et al.Nature 440:671-675(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Daub H.,et al.Mol. Cell 31:438-448(2008).