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ULK3 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS16046

Specification

ULK3 Antibody (Internal) - Product Information

Application	**IF, IHC, WB**
Primary Accession	Q6PHR2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**53kDa KDa**

ULK3 Antibody (Internal) - Additional Information

Gene ID 25989

Other Names
Serine/threonine-protein kinase ULK3, 2.7.11.1, Unc-51-like kinase 3, ULK3

Target/Specificity
ULK3 antibody is human specific. Multiple isoforms of ULK3 are known to exist.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

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

ULK3 Antibody (Internal) - 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

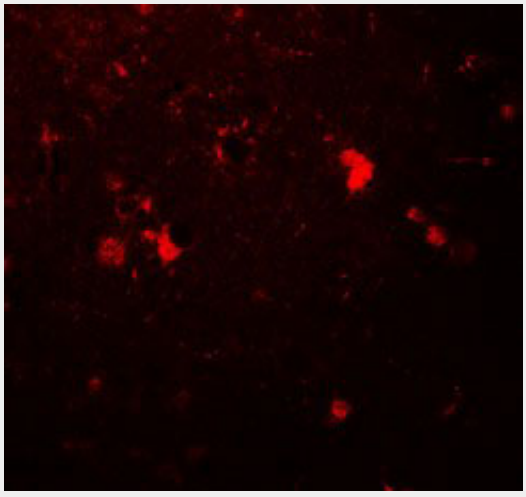
Widely expressed. Highest levels observed in fetal brain. In adult tissues, high levels in brain, liver and kidney, moderate levels in testis and adrenal gland and low levels in heart, lung, stomach, thymus, prostate and placenta. In the brain, highest expression in the hippocampus, high levels also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

ULK3 Antibody (Internal) - Protocols

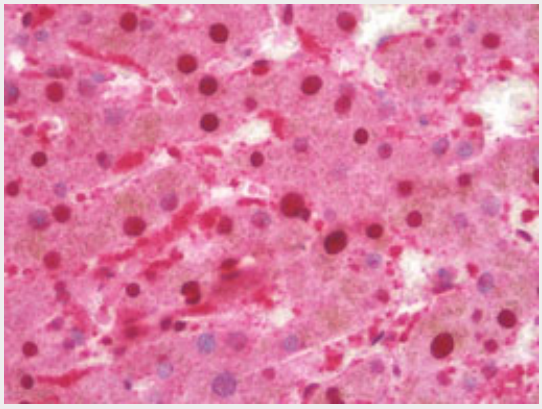
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ULK3 Antibody (Internal) - Images



Immunofluorescence of ULK3 in human brain tissue with ULK3 antibody at 20 µg/mL.



Anti-ULK3 antibody IHC staining of human liver.

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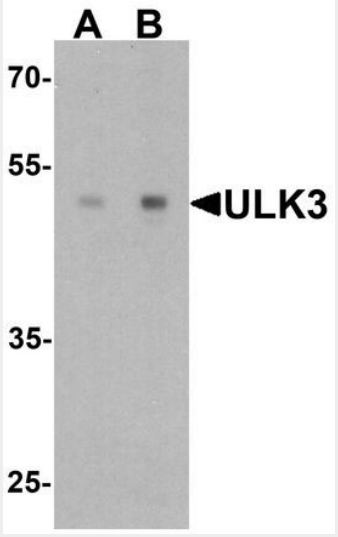

Western blot analysis of ULK3 in human brain tissue lysate with ULK3 antibody at (A) 0.5 and (B)...

ULK3 Antibody (Internal) - 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 (Internal) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
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Daub H.,et al.Mol. Cell 31:438-448(2008).