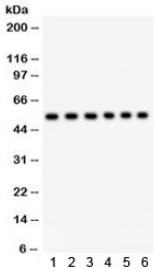
ULK3 Antibody (R32269)

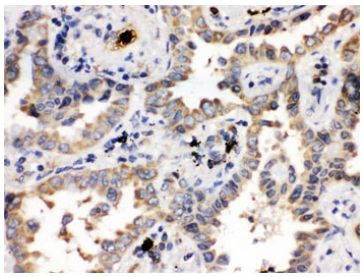
Catalog No.	Formulation	Size
R32269	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

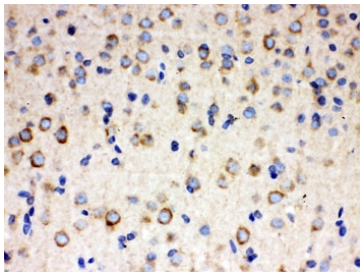
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q6PHR2
Localization	Cytoplasmic
Applications	Western blot: 0.1-0.5ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml Flow cytometry: 1-3ug/10^6 cells
Limitations	This ULK3 antibody is available for research use only.



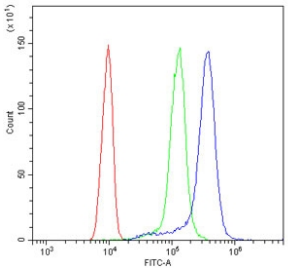
Western blot testing of 1) rat brain, 2) rat testis, 3) mouse brain, and human 4) placenta, 5) 22RV1, and 6) SMMC lysate with ULK3 antibody. Predicted/observed molecular weight ~53 kDa.



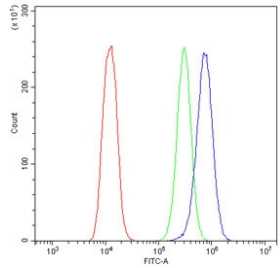
IHC testing of FFPE human lung cancer with ULK3 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat brain with ULK3 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Flow cytometry testing of human ThP-1 cells with ULK3 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ULK3 antibody.



Flow cytometry testing of human U-2 OS cells with ULK3 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ULK3 antibody.

Description

Serine/threonine protein kinase that acts as a regulator of Sonic hedgehog (SHH) signaling and autophagy. In search of potential homologues to Drosophila and human Fu, people have cloned human serine/threonine kinase ULK3 and assessed its ability to regulate GLI transcription factors, mediators of SHH signaling. And ULK3 enhances endogenous and over-expressed GLI1 and GLI2 transcriptional activity in cultured cells, as assessed by GLI-luciferase reporter assay. Besides that, ULK3 alters subcellular localization of GLI1, as assessed by immunofluorescent staining and immunoblotting assays. It is showed that ULK3 is an autophosphorylated kinase and phosphorylates GLI proteins in vitro. Also, ULK3 catalytical activity is crucial for its function in SHH pathway. It is demonstrated that ULK3 is widely expressed and its expression is higher in a number of tissues where Shh signaling is known to be active. The data suggest that serine/threonine kinase ULK3 is involved in the SHH pathway as a positive regulator of GLI proteins.

Application Notes

Optimal dilution of the ULK3 antibody should be determined by the researcher.

Immunogen

Amino acids HTEVQNLMARAEYLKEQVKMRESRWEAD of human ULK3 were used as the immunogen for the ULK3 antibody.

Storage

After reconstitution, the ULK3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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