10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ULK3 Monoclonal Antibody

Catalog # ABO14470

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	Q6PHR2
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-ULK3 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

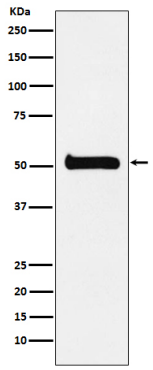
Gene ID	25989
Other Names	Serine/threonine-protein kinase ULK3, 2.7.11.1, Unc-51-like kinase 3, ULK3
Calculated MW	53444
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ACHC-21
Immunogen	A synthesized peptide derived from human ULK3 Serine/threonine protein kinase which enhances GLI1 and GLI2 transcriptional activity and consequently positively regulates GLI-dependent SHH signaling. May exert this function by promoting GLI1 nuclear localization. Phosphorylates in vitro GLI2, as well as GLI1 and GLI3, although less efficiently.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	ULK3 {ECO:0000303|PubMed:19878745, ECO:0000312|HGNC:HGNC:19703}

Function	Serine/threonine protein kinase that acts as a regulator of smoothened signaling and autophagy (PubMed:19279323, PubMed:19878745, PubMed:20643644, PubMed:31279575). Acts as a positive regulator of smoothened signaling in the presence of hedgehog (DHH, IHH or SHH) ligand: autophosphorylates and mediates phosphorylation of full-length GLI2, promoting subsequent phosphorylation by CDK1 and GLI2 dissociation from SUFU and translocation to the nucleus (PubMed:19878745, PubMed:20643644, PubMed:31279575). Also phosphorylates as GLI1 and GLI3, although less efficiently (PubMed:19878745, PubMed:20643644). In the absence of hedgehog ligand, interacts with SUFU, thereby inactivating the protein kinase activity and preventing phosphorylation of GLI proteins (GLI1, GLI2 and/or GLI3) (PubMed:20643644). Also acts as a regulator of autophagy: following cellular senescence, able to induce autophagy (PubMed:19279323).
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

Images



Western blot analysis of ULK3 expression in 293T cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.