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ULK3 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13473b

Specification

ULK3 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q6PHR2

ULK3 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 25989

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13473b was selected from the C-term region of ULK3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ULK3 Antibody (C-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

ULK3 Antibody (C-term) Blocking peptide - Images

ULK3 Antibody (C-term) Blocking peptide - Background

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.

ULK3 Antibody (C-term) Blocking peptide - References

Maloverjan, A., et al. J. Biol. Chem. 285(39):30079-30090(2010)Takeuchi, F., et al. Circulation 121(21):2302-2309(2010)Maloverjan, A., et al. Exp. Cell Res. 316(4):627-637(2010)Levy, D., et al. Nat. Genet. 41(6):677-687(2009)Kim, D.H., et al. Blood 113(11):2517-2525(2009)