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Anti-STK36 Antibody

Catalog # AP53977

Product Information

Application	WB, IHC
Primary Accession	Q9NRP7
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	143995

Additional Information

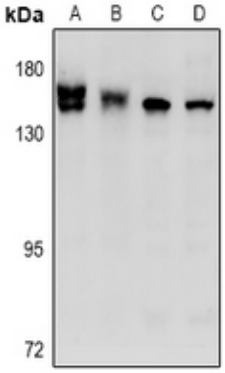
Gene ID	27148
Other Names	KIAA1278; Serine/threonine-protein kinase 36; Fused homolog
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human STK36. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/100
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

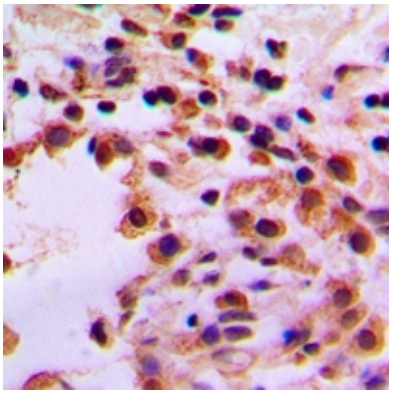
Name	STK36 {ECO:0000303|PubMed:31279575, ECO:0000312|HGNC:HGNC:17209}
Function	Serine/threonine protein kinase which plays an important role in the smoothened pathway by regulating the activity of GLI transcription factors (PubMed:10806483, PubMed:28543983, PubMed:31279575, PubMed:38096226). Controls the activity of the transcriptional regulators GLI1, GLI2 and GLI3 by opposing the effect of SUFU and promoting their nuclear localization (PubMed:10806483, PubMed:31279575, PubMed:38096226). Acts by mediating phosphorylation of GLI proteins, promoting their dissociation from SUFU (PubMed:28543983, PubMed:31279575, PubMed:38096226). Also catalyzes phosphorylation of ULK4 adapter (PubMed:38096226). GLI2 requires an additional function of STK36 to become transcriptionally active, but the enzyme does not need to possess an active kinase catalytic site for this to occur (PubMed:10806483). Required for postnatal development, possibly by regulating the homeostasis of cerebral spinal fluid or ciliary function (PubMed:28543983). Essential for construction of the central pair apparatus of motile cilia (PubMed:28543983).

Cellular Location	Cell projection, cilium. Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm Nucleus. Note=STK36 and ULK4 are mutually dependent for localization to ciliary tip (PubMed:38096226). Low levels also present in the nucleus (PubMed:10806483)
Tissue Location	Expressed at low levels in most fetal tissues, adult ovaries and at high levels in adult testis, where it is localized in germ cells (PubMed:10806483). Expressed in respiratory epithelial cells of the lung (PubMed:28543983).

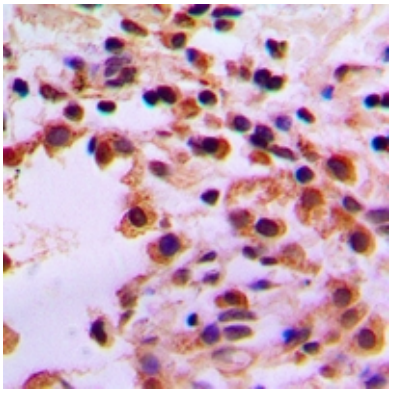
Images



Western blot analysis of STK36 expression in mouse testis (A), rat testis (B), LO2 (C), A549 (D) whole cell lysates. (Predicted band size: 143 kD; Observed band size: 145 kD)



Immunohistochemical analysis of STK36 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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