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STK36 Rabbit pAb

Catalog # AP100258

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9NRP7
Other Accession	Q9NRP7
Reactivity	Human, Mouse
Predicted	Rat, Pig, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	143995
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human STK36
Epitope Specificity	21-120/1315
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Contains 1 protein kinase domain.
SUBUNIT	Interacts with SPAG16 and KIF27 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Serine/threonine protein kinase required for postnatal development, possibly by regulating the homeostasis of cerebral spinal fluid or ciliary function. Controls the activity of the transcriptional regulators GLI1, GLI2 and GLI3 by opposing the effect of SUFU and promoting their nuclear localization. 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.

Additional Information

Gene ID	27148
Other Names	CILD46; FU; 1700112N14Rik; B930045J24; Fused; mKIAA1278; STK36_HUMAN; STK36; Fused homolog; 2.7.11.1; KIAA1278; STK36_MOUSE; serine/threonine kinase 36; serine/threonine kinase 36 (fused homolog, Drosophila); fused homolog (Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

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