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Rabbit Anti-Multicilin/FITC Conjugated antibody

SL12399R-FITC

Product Name:	Anti-Multicilin/FITC
Chinese Name:	FITC标记的多纤毛素蛋白抗体
Alias:	IDAS; Mci; MCI_HUMAN; Multicilin; Protein Idas.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,
Applications:	ICC=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	42kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Multicilin
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
Product Detail:	**background:** Transcription regulator required for multiciliate cell differentiation. Acts by promoting transcription of genes required for multiciliate cell formation. Probably acts in a multiprotein complex (By similarity). Plays a role in mitotic cell cycle progression by promoting cell cycle exit. **Function:** Multiciliate cells function prominently in the respiratory system, brain ependyma and female reproductive tract to produce vigorous fluid flow along epithelial surfaces. These specialized cells form during development when epithelial progenitors undergo

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an unusual form of ciliogenesis, in which they assemble and project hundreds of motile cilia. Notch inhibits multiciliate cell formation in diverse epithelia, but how progenitors overcome lateral inhibition and initiate multiciliate cell differentiation is unknown. Here we identify a coiled-coil protein, termed multicilin, which is regulated by Notch and highly expressed in developing epithelia where multiciliate cells form. Inhibiting multicilin function specifically blocks multiciliate cell formation in Xenopus skin and kidney, whereas ectopic expression induces the differentiation of multiciliate cells in ectopic locations. Multicilin localizes to the nucleus, where it directly activates the expression of genes required for multiciliate cell formation, including foxj1 and genes mediating centriole assembly. Multicilin is also necessary and sufficient to promote multiciliate cell differentiation in mouse airway epithelial cultures. These findings indicate that multicilin initiates multiciliate cell differentiation in diverse tissues, by coordinately promoting the transcriptional changes required for motile ciliogenesis and centriole assembly.

Subunit:
Homodimer. Interacts with GMNN; targets GMNN to the nucleus, prevents GMNN interaction with CDT1 and competes with IDAS homodimerization.

Subcellular Location:
Nucleus. Excluded from the nucleolus.

DISEASE:
Probable target of the anaphase promoting complex/cyclosome (APC/C) which regulates its level in the cell during the mitotic cell cycle. Highly expressed during interphase and early mitosis. Expression decreases during anaphase to become undetectable during telophase and cytokinesis.

Similarity:
Belongs to the geminin family.

Database links:

Entrez Gene: 345643Human

Omim: 614086Human

SwissProt: D6RGH6Human

Unigene: 394578Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

多纤毛素(multicilin)可以促进细胞长出许多纤毛。当细胞暴露在多纤毛素中，它们

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	长出许多纤毛的遗传机制被激活。在发育中的胚胎里，这种蛋白指导某种位于肺部、肾脏和皮肤表面的Stem cells发育为多纤毛细胞。如慢性哮喘、肺气肿和囊肿性纤维化(cystic fibrosis)之类呼吸道疾病的病人经常遭受肺部感染，这可能是由于将保护性粘液从气管中移走的多纤毛细胞受损导致的。在未来，Stem cells治疗可能用新的纤毛细胞替换这些受损的细胞，但是科学家首先需要知道如何指导Stem cells沿着发育途径长成多纤毛细胞。

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