10320 Camino Santa Fe, Suite G
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RSPH4A Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54516

Specification

RSPH4A Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q5TD94
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**81 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human RSPH4A/RSHL3**
Epitope Specificity	**435-482/716**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm; cytoskeleton; cilium axoneme. Radial spoke.**
SIMILARITY	**Belongs to the flagellar radial spoke RSP4/6 family.**
DISEASE	**Defects in RSPH4A are the cause of primary ciliary dyskinesia type 11 (CILD11) [MIM:612649]. CILD is an autosomal recessive disorder characterized by axonemal abnormalities of motile cilia. Respiratory infections leading to chronic inflammation and bronchiectasis are recurrent, due to defects in the respiratory cilia; reduced fertility is often observed in male patients due to abnormalities of sperm tails. Half of the patients exhibit situs inversus, due to dysfunction of monocilia at the embryonic node and randomization of left-right body asymmetry. Primary ciliary dyskinesia associated with situs inversus is referred to as Kartagener syndrome.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
RSHL3 is predicted to be a component of the radial spoke head based on homology with proteins in the biflagellate alga Chlamydomonas reinhardtii and other ciliates. RSHL3 (radial spoke head-like protein 3), also known as radial spoke head protein 4 homolog A, is a 716 amino acid protein that belongs to the flagellar radial spoke RSP4/6 family. Mutations in the RSHL3 gene

cause primary ciliary dyskinesia 1, a disease arising from dysmotility of motile cilia and sperm. Existing as three alternatively spliced isoforms, the RSHL3 gene contains 6 exons, is conserved in chimpanzee, dog, cow, mouse, rat, chicken, zebrafish, fruit fly and P.falciparum, and maps to human chromosome 6q22.1.

RSPH4A Polyclonal Antibody - Additional Information

Gene ID 345895

Other Names
Radial spoke head protein 4 homolog A, Radial spoke head-like protein 3, RSPH4A, RSHL3

Target/Specificity
Defects in RSPH4A are the cause of primary ciliary dyskinesia type 11 (CILD11) [MIM:612649]. CILD is an autosomal recessive disorder characterized by axonemal abnormalities of motile cilia. Respiratory infections leading to chronic inflammation and bronchiectasis are recurrent, due to defects in the respiratory cilia; reduced fertility is often observed in male patients due to abnormalities of sperm tails. Half of the patients exhibit situs inversus, due to dysfunction of monocilia at the embryonic node and randomization of left-right body asymmetry. Primary ciliary dyskinesia associated with situs inversus is referred to as Kartagener syndrome.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

RSPH4A Polyclonal Antibody - Protein Information

Name RSPH4A

Synonyms RSHL3

Function
Component of the axonemal radial spoke head which plays an important role in ciliary motility (PubMed:19200523). Essential for triplet radial spokes (RS1, RS2 and RS3) head assembly in the motile cilia (By similarity).

Cellular Location
Cytoplasm, cytoskeleton, cilium axoneme. Cell projection, cilium

Tissue Location
Expressed in trachea, lungs, and testes (PubMed:23993197). Very strong expression is detected in nasal brushings (PubMed:19200523).

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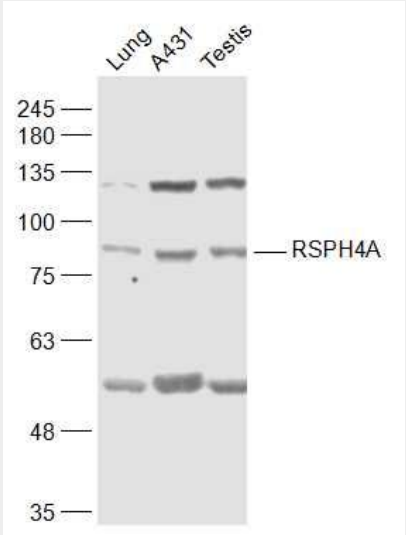
RSPH4A Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RSPH4A Polyclonal Antibody - Images



Sample:
Lung (Mouse) Lysate at 40 ug
A431(Human) Cell Lysate at 30 ug
Testis (Mouse) Lysate at 40 ug
Primary: Anti-RSPH4A (bs-11472R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 81 kD
Observed band size: 81 kD

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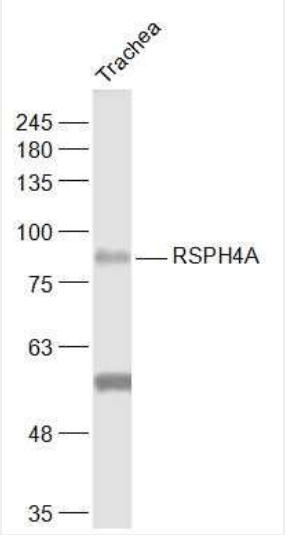

Sample:
Trachea (Mouse) Lysate at 40 ug
Primary: Anti-RSPH4A (bs-11472R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 81 kD
Observed band size: 81 kD