

KIAA1598 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54652

Specification

KIAA1598 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	A0MZ66
Reactivity	Rat, Pig, Cow
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71640

KIAA1598 Polyclonal Antibody - Additional Information

Gene ID 57698

Other Names

Shootin-1
{ECO:0000312|HGNC:HGNC:29319},
Shootin1, SHTN1 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=29319)
target="_blank">HGNC:29319),
KIAA1598

Format

0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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.

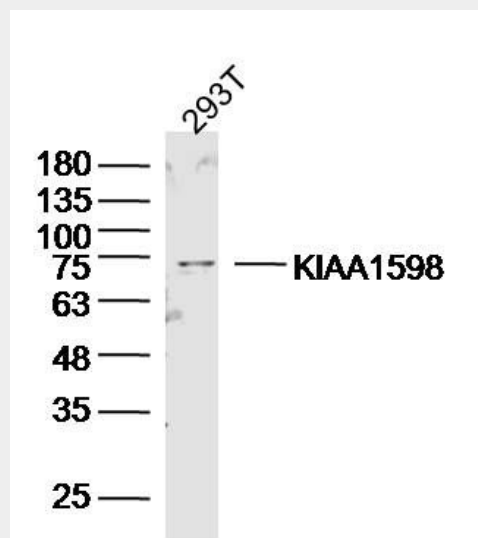
KIAA1598 Polyclonal Antibody - Protein Information

Name SHTN1 ([HGNC:29319](#))

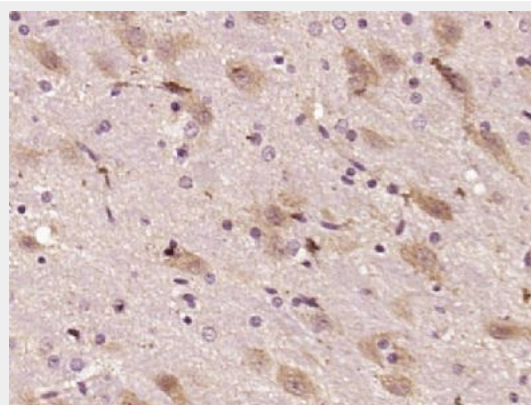
Synonyms KIAA1598

Function

Involved in the generation of internal asymmetric signals required for neuronal polarization and neurite outgrowth.



Sample: 293T Cell (Human) Lysate at 40 ug
Primary: Anti-KIAA1598(bs-11863R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 72kD
Observed band size: 72kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KIAA1598)

Mediates netrin-1-induced F-actin-substrate coupling or 'clutch engagement' within the axon growth cone through activation of CDC42, RAC1 and PAK1- dependent signaling pathway, thereby converting the F-actin retrograde flow into traction forces, concomitantly with filopodium extension and axon outgrowth. Plays a role in cytoskeletal organization by regulating the subcellular localization of phosphoinositide 3-kinase (PI3K) activity at the axonal growth cone. Plays also a role in regenerative neurite outgrowth. In the developing cortex, cooperates with KIF20B to promote both the transition from the multipolar to the bipolar stage and the radial migration of cortical neurons from the ventricular zone toward the superficial layer of the neocortex. Involved in the accumulation of phosphatidylinositol 3,4,5-trisphosphate (PIP3) in the growth cone of primary hippocampal neurons.

Cellular Location

Perikaryon

{ECO:0000250|UniProtKB:Q8K2Q9}. Cell projection, axon

{ECO:0000250|UniProtKB:Q8K2Q9}. Cell projection, growth cone

{ECO:0000250|UniProtKB:Q8K2Q9}.

Cytoplasm, cytoskeleton

{ECO:0000250|UniProtKB:Q8K2Q9}. Cell projection, filopodium

{ECO:0000250|UniProtKB:A0MZ67}. Cell projection, lamellipodium

{ECO:0000250|UniProtKB:A0MZ67}.

Note=Localizes in multiple growth cones at neurite tips before the neuronal symmetry-breaking step. Accumulates in growth cones of a single nascent axon in a neurite length-dependent manner during the neuronal symmetry-breaking step; when absent from the nascent axon's siblings, probably due to competitive transport, prevents the formation of surplus axons. Transported anterogradely from the soma to the axon growth cone in an actin and myosin-dependent manner and passively diffuses back to the cell bodies. Colocalized with L1CAM in close apposition with actin filaments in filopodia and lamellipodia of axonal growth cones in hippocampal neurons. Exhibits retrograde movements in filopodia and lamellopodia of axonal growth cones. Colocalized with KIF20B along microtubules to the tip of the growing cone in primary hippocampal

Polyclonal Antibody, Unconjugated (bs-11863R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

neurons. Recruited to the growth cone of developing axon in a KIF20B- and microtubule-dependent manner
{ECO:0000250|UniProtKB:A0MZ67,
ECO:0000250|UniProtKB:Q8K2Q9}

KIAA1598 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 Cytometry](#)
- [Cell Culture](#)