



Shootin 1 Rabbit pAb

Catalog No	YP-Ab-19515
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	KIAA1598
Immunogen	Synthesized peptide derived from human Shootin 1. AA range:50-120
Specificity	This antibody detects endogenous levels of Shootin 1 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-15°C to -25°C/1 year(Do not lower than -25°C)
Synonyms	KIAA1598;Shootin-1
Observed Band	
Calculated Molecular Weight	69kD
Cell Pathway	Perikaryon . Cell projection , axon . Cell projection , growth cone . Cytoplasm , cytoskeleton . Cell projection , filopodium . Cell projection , lamellipodium . 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 neurons. Recruited to the growth cone of developing axon in a KIF20B- and microtubule-dependent manner. .
Tissue Specificity	
Function	Involved in the generation of internal asymmetric signals required for neuronal polarization and neurite outgrowth. 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.

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images