OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA396524S

KIF5B Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	**WB**: 1:100-1:500 **IHC**: User Optimized **ELISA**: 1:10000
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Anti-Kinesin-1 was prepared from whole rabbit serum produced by repeated immunizations with a truncated kinesin-1 construct expressed in E. coli corresponding to human kinsesin-1protein.
Specificity:	Anti-Kinesin-1 is directed against the human kinesin-1 protein. The product was prepared from monospecific antiserum by delipidation and defibrination. A BLAST analysis was used to suggest reactivity with human. Cross-reactivity with kinesin 1 from other sources have not been determined.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	77 mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Gene Name:	kinesin family member 5B
Database Link:	Entrez Gene 3799 Human P33176

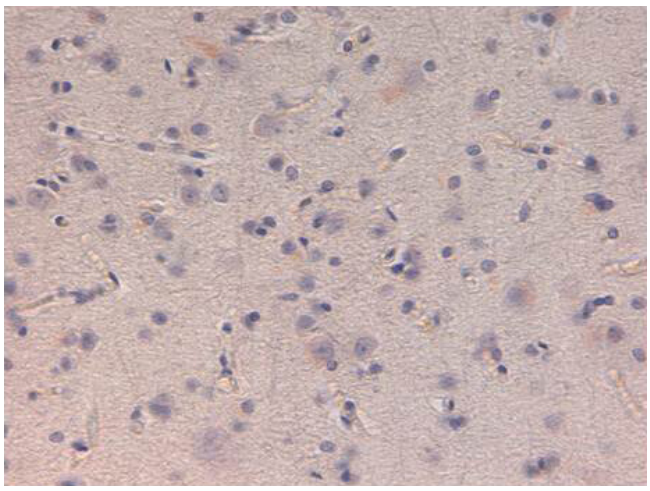
View online »

Background: Intracellular transport is critical to cellular functions and the maintenance of its integrity (membrane renewal, vesicles trafficking, cell division, mRNA transport, etc.). Among the molecular motors that are involved in intracellular transport, three large superfamilies have been identified and well characterized these last decades – kinesins, dyneins and myosins. Kinesins, also known as KIFs, are microtubule-dependent molecular motors that use ATP as chemical fuel to transport cargo along the microtubule network. Indeed, five major kinesin families were initially described but there are as many as 45 mammalian kinesin genes to date. In most kinesins, the motor domain is found at the N-terminus (N-type). N-type kinesins are (+) end-directed motors, i.e. they transport cargo towards the (+) end of the microtubule. In the neuronal axon, synaptic vesicle precursors, mitochondria and protein complexes are transported bi-directionally. While retrograde transport is powered by dyneins, anterograde transport is essentially powered by kinesins. Deciphering the regulation and functions of kinesins constitutes a major challenge and will broaden our understanding of molecular motors implications in intracellular transport.

Synonyms: rabbit anti-Kinesin 1 Antibody, Conventional kinesin heavy chain, Ubiquitous kinesin heavy chain, KNS, KNS1, Kinesin-1 heavy chain, UKHC, Anti-Kinesin-1 antibody, kinesin 1 antibody, kin1, kin-1, KIF5, KHC, Kinesin motor domain

Note: Kinesin-1 antibody has been tested for use in western blot, and immunohistochemistry. For western blots expect a band of approximately 72 kDa in size corresponding to truncated kinesin-1 protein. Specific conditions for reactivity should be optimized by the end user.

Product images:



Immunohistochemistry of Rabbit anti-Kinesin-1. Tissue: Human Brain at 40X at pH 6.