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 SM3117P

KIF5B Mouse Monoclonal Antibody [Clone ID: KN-02]

Product data:

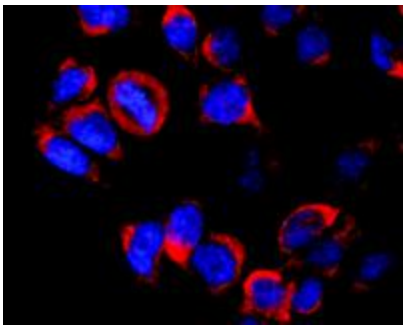
Product Type:	Primary Antibodies
Clone Name:	KN-02
Applications:	IF
Recommended Dilution:	Immunocytochemistry.
Reactivity:	Human, Porcine, Mouse, Rat
Host:	Mouse
Isotype:	IgM
Clonality:	Monoclonal
Immunogen:	Enriched fraction of porcine brain kinesin.
Specificity:	The antibody KN-02 recognizes heavy chain of conventional kinesin associated with vesicles and with lower affinity with denaturated molecule. Epitope is located in coiled-coil stalk domain. It stains Western blots of kinesin-enriched preparations. Epitope mapping (by limited proteolysis of partially purified porcine kinesin) followed by immunoblotting has revealed that antibodies KN-01, KN-02 and KN-03 react with different sets of fragments. The antibody KN-02 does not react with kinesin bound to taxol-stabilized microtubules.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 State: Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Thiophilic adsorption-affinity chromatography; purity: > 95 % (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	kinesin family member 5B
Database Link:	Entrez Gene 3799 Human P33176

View online »

Background: Kinesin belongs to the group of microtubule-associated motor proteins known to convert chemical energy released from nucleoside triphosphates (preferentially from ATP) into mechanical energy. Conventional kinesin, member of the kinesin superfamily comprising more than 100 proteins, is involved in the anterograde vesicle transport in neuronal cells. Kinesin purified from mammalian brain homogenates is a heterotetramer consisting of two heavy (120 to 130 kDa) and two light chains (60 to 70 kDa), resulting in a molecular mass about 400 kDa. Each heavy chain contains an N-terminal globular motordomain with both a microtubule-binding site and an ATPase active center, stalk region responsible for heavy chain dimerization and finally C-terminal globular tail domain, which is implicated in cargo binding. Light chains may have a regulatory function.

Synonyms: KIF5B, KNS, KNS1, Kinesin-1 heavy chain, Ubiquitous kinesin heavy chain, UKHC, Conventional kinesin heavy chain

Product images:



Immunofluorescence staining of vesicles (red) in RBL-2H3 rat basophilic leukemia cell line using anti-Kinesin (KN-02). Nuclei were stained with DAPI (blue).