10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LZTS2 Antibody

Catalog # ASC11420

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9BRK4
Other Accession	NP_115805, 45331215
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	72759
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LZTS2 antibody can be used for detection of EPAC1 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	84445
Other Names	Leucine zipper putative tumor suppressor 2 {ECO:0000255|HAMAP-Rule:MF_03026}, hLZTS2, Protein LAPSER1 {ECO:0000255|HAMAP-Rule:MF_03026}, LZTS2 {ECO:0000255|HAMAP-Rule:MF_03026}
Target/Specificity	LZTS2; LZTS2 antibody is predicted to not cross-react with other LZTS family members
Reconstitution & Storage	LZTS2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	LZTS2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LZTS2 {ECO:0000255|HAMAP-Rule:MF_03026}
Function	Negative regulator of katanin-mediated microtubule severing and release from the centrosome. Required for central spindle formation and the completion of cytokinesis. May negatively regulate axonal outgrowth by preventing the formation of microtubule bundles that are necessary for transport within the elongating axon. Negative regulator of the Wnt signaling pathway. Represses beta-catenin-mediated transcriptional activation by

	promoting the nuclear exclusion of beta- catenin.
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Localized to the centrosome throughout the cell cycle. Localized to the midbody in cells undergoing cytokinesis
Tissue Location	Highly expressed in prostate and testis, and at slightly lower levels in spleen, thymus, uterus, small intestine and colon.

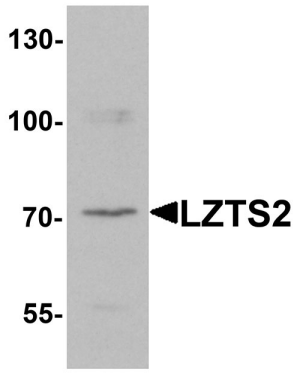
Background

LZTS2 Antibody: The leucine zipper putative tumor suppressor 2 (LZTS2, also known as LAPSER1), a member of the LZTS family, is a negative regulator of the Wnt signaling pathway. It represses beta-catenin-mediated transcriptional activation by promoting the nuclear exclusion of beta-catenin. LZTS2 is involved in cytokinesis and regulates katanin-mediated microtubule severing and release from the centrosome. LZTS2 may negatively regulate axonal outgrowth by preventing the formation of microtubule bundles that are necessary for transport within the elongating axon. LZTS2 is highly expressed in testis and prostate, but it is deleted in multiple cancers, including prostate tumors, suggesting that LZTS2 acts as a potential tumor suppressor.

References

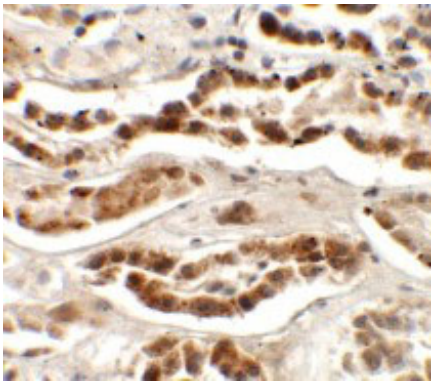
Thyssen G, Li TH, Lehmann L, et al. LZTS2 is a novel beta-catenin-interacting protein and regulates the nuclear export of beta-catenin. Mol. Cell. Biol. 2006; 26:8857-67
Sudo H and Maru Y. LAPSER1/LZTS2: a pluripotent tumor suppressor linked to the inhibition of katanin-mediated microtubule severing. Hum. Mol. Genet. 2008; 17:2524-40.
Sudo H and Maru Y. LAPSER1 is a putative cytokinetic tumor suppressor that shows the same centrosome and midbody subcellular localization pattern as p80 Katanin. FASEB J. 2007; 21:2086-100.
Cabeza-Arvelaiz Y, Thompson TC, Sepulveda JL, et al. LAPSER1: a novel candidate tumor suppressor gene from 10q24.3. Oncogene 2001; 20:6707-17.

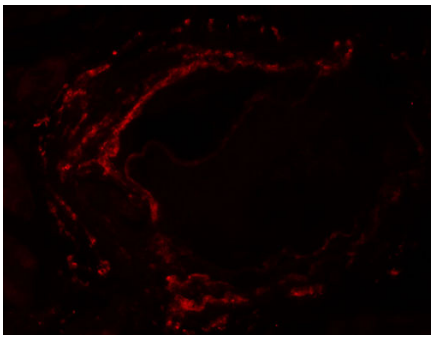
Images



Western blot analysis of LZTS2 in human kidney tissue lysate with LZTS2 antibody at 1 µg/mL.

Immunohistochemistry of LZTS2 in human kidney tissue with LZTS2 antibody at 2.5 µg/mL.





Immunofluorescence of LZTS2 in human kidney tissue with LZTS2 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.