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LUZP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57086

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	Q86V48
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	120275

Additional Information

Gene ID	7798
Other Names	Leucine zipper protein 1, LUZP1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500
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.

Protein Information

Name	LUZP1
Function	F-actin cross-linking protein (PubMed: 30990684). Stabilizes actin and acts as a negative regulator of primary cilium formation (PubMed:32496561). Positively regulates the phosphorylation of both myosin II and protein phosphatase 1 regulatory subunit PPP1R12A/MYPT1 and promotes the assembly of myosin II stacks within actin stress fibers (PubMed:38832964). Inhibits the phosphorylation of myosin light chain MYL9 by DAPK3 and suppresses the constriction velocity of the contractile ring during cytokinesis (PubMed:38009294). Binds to microtubules and promotes epithelial cell apical constriction by up- regulating levels of diphosphorylated myosin light chain (MLC) through microtubule-dependent inhibition of MLC dephosphorylation by myosin phosphatase (By similarity). Involved in regulation of cell migration, nuclear size and centriole number, probably through regulation of the actin cytoskeleton (By similarity). Component of the CERF-1 and CERF-5 chromatin remodeling complexes in embryonic stem cells where it acts to stabilize the complexes (By similarity). Plays a role in embryonic brain and cardiovascular development (By similarity).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, cilium basal body. Midbody. Chromosome,

centromere. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, stress fiber. Nucleus {ECO:0000250|UniProtKB:Q9ESV1} Cell projection, dendrite {ECO:0000250|UniProtKB:Q9ESV1}. Perikaryon {ECO:0000250|UniProtKB:Q9ESV1}. Cell junction, tight junction {ECO:0000250|UniProtKB:Q8R4U7}. Note=Localizes to the proximal end of basal bodies (PubMed:32496561). During mitosis, localizes at the inner centromere in metaphase, at the central spindle in anaphase, and at the midbody in telophase (PubMed:38009294). Central spindle localization requires KIF20A while centromere localization requires the kinase activity of the chromosomal passenger complex (PubMed:38009294)