

LEMD2 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS15628**Specification**

LEMD2 Antibody (Internal) - Product Information

Application	WB, IHC-P, IF, ICC
Primary Accession	Q8NC56
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

LEMD2 Antibody (Internal) - Additional Information**Gene ID** 221496**Other Names**

LEM domain-containing protein 2, hLEM2, LEMD2

Target/Specificity

Human LEMD2. At least two isoforms of LEMD2 are known to exist; this antibody will detect only the longer isoform.

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

LEMD2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

LEMD2 Antibody (Internal) - Protein Information**Name** LEMD2**Function**

Nuclear lamina-associated inner nuclear membrane protein that is involved in nuclear structure organization, maintenance of nuclear envelope (NE) integrity and NE reformation after mitosis (PubMed:16339967, PubMed:17097643, PubMed:28242692, PubMed:32494070). Plays a role as transmembrane adapter for the endosomal sorting complexes required for transport (ESCRT), and is thereby involved in ESCRT-mediated NE reformation (PubMed:<a

[28242692](http://www.uniprot.org/citations/28242692), PubMed: [32494070](http://www.uniprot.org/citations/32494070)). Promotes ESCRT-mediated NE closure by recruiting CHMP7 and downstream ESCRT-III proteins IST1/CHMP8 and CHMP2A to the reforming NE during anaphase (PubMed: [28242692](http://www.uniprot.org/citations/28242692)). During nuclear reassembly, condenses into a liquid-like coating around microtubule spindles and coassembles with CHMP7 to form a macromolecular O-ring seal at the confluence between membranes, chromatin, and the spindle to facilitate early nuclear sealing (PubMed: [32494070](http://www.uniprot.org/citations/32494070)). Plays a role in the organization of heterochromatin associated with the NE and in the maintenance of NE organization under mechanical stress (By similarity). Required for embryonic development and involved in regulation of several signaling pathways such as MAPK and AKT (By similarity). Required for myoblast differentiation involving regulation of ERK signaling (By similarity). Essential for cardiac homeostasis and proper heart function (By similarity).

Cellular Location

Nucleus inner membrane; Multi-pass membrane protein. Nucleus envelope. Cytoplasm, cytoskeleton, spindle. Note=Lamina-associated protein residing in the inner nuclear membrane (INM) of the nuclear envelope (NE) (PubMed:16339967). The localization to the INM is dependent on LMNA (PubMed:16339967). Evenly distributed around the NE during interphase (PubMed:16339967). During metaphase, found in a reticular network (PubMed:28242692). Recruited to the reforming NE on chromatin disks in early anaphase (PubMed:28242692). In late anaphase, concentrates at the NE core proximal to spindle microtubules, and then broadening to a distributed nuclear rim pattern (PubMed:28242692, PubMed:32494070)

Tissue Location

Ubiquitously expressed, including bone marrow, brain, kidney, colon, skeletal muscle, thymus, testis and uterus

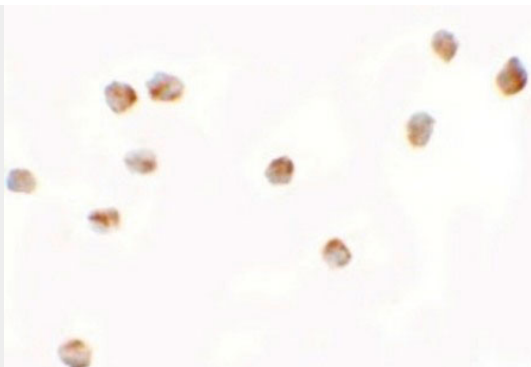
LEMD2 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

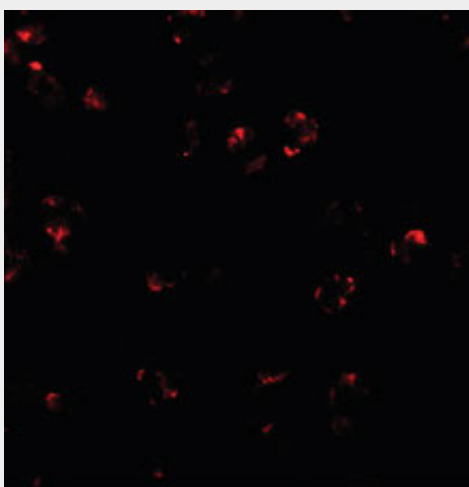
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LEMD2 Antibody (Internal) - Images

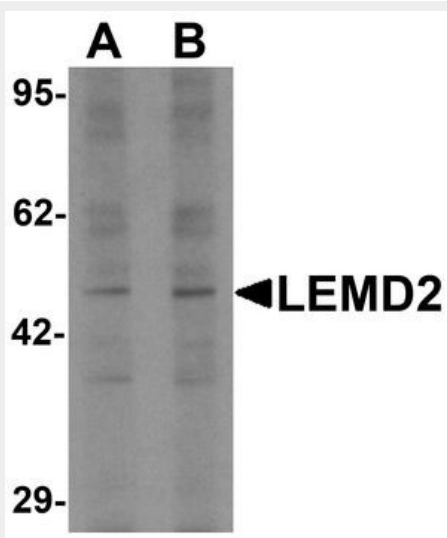




Immunocytochemistry of LEMD2 in 3T3 cells with LEMD2 antibody at 2.5 ug/ml.



Immunofluorescence of LEMD2 in 3T3 cells with LEMD2 antibody at 20 ug/ml.



Western blot analysis of LEMD2 in 293 cell lysate with LEMD2 antibody at (A) 1 and (B) 2 ug/ml.

LEM2 Antibody (Internal) - Background

Involved in nuclear structure organization.

LEM2 Antibody (Internal) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Otsuki T.,et al.DNA Res. 12:117-126(2005).
Mungall A.J.,et al.Nature 425:805-811(2003).
Brachner A.,et al.J. Cell Sci. 118:5797-5810(2005).
Olsen J.V.,et al.Cell 127:635-648(2006).