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LEMD2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19287A

Specification

LEMD2 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q8NC56
Other Accession	NP_851853.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**56975**
Antigen Region	**10-39**

LEMD2 Antibody (N-term) - Additional Information

Gene ID 221496

Other Names
LEM domain-containing protein 2, hLEM2, LEMD2

Target/Specificity
This LEMD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from the N-terminal region of human LEMD2.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
LEMD2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LEMD2 Antibody (N-term) - 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:28242692, PubMed: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). 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). 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 (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LEMD2 Antibody (N-term) - Images

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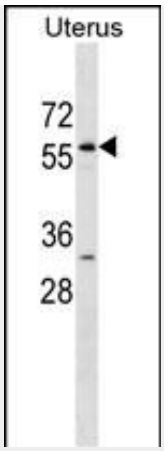

LEMD2 Antibody (N-term)(Cat. #AP19287a) western blot analysis in Uterus tissue lysates (35ug/lane).This demonstrates the LEMD2 antibody detected the LEMD2 protein (arrow).

LEMD2 Antibody (N-term) - Background

LEMD2 is involved in nuclear structure organization.

LEMD2 Antibody (N-term) - References

Kestenbaum, B., et al. J. Am. Soc. Nephrol. 21(7):1223-1232(2010) Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) : Cotsapas, C., et al. Hum. Mol. Genet. 18(18):3502-3507(2009)