

LEMD3 Antibody

Catalog # ASC11406

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9Y2U8
Other Accession	NP_055134 , 7706607
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	99997
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LEMD3 antibody can be used for detection of LEMD3 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 5 μ g/mL.

Additional Information

Gene ID	23592
Other Names	Inner nuclear membrane protein Man1, LEM domain-containing protein 3, LEMD3, MAN1
Target/Specificity	LEMD3; At least three isoforms of LEMD3 are known to exist; this antibody will detect all isoforms. LEMD3 antibody is predicted to not cross-react with LEMD1 and LEMD2
Reconstitution & Storage	LEMD3 antibody can be stored at 4°C for three months and -20°C, 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	LEMD3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LEMD3
Synonyms	MAN1
Function	Can function as a specific repressor of TGF-beta, activin, and BMP signaling through its interaction with the R-SMAD proteins. Antagonizes TGF-beta-induced cell proliferation arrest.
Cellular Location	Nucleus inner membrane; Multi-pass membrane protein

Tissue Location

Heart, brain, placenta, lung, liver and skeletal muscle

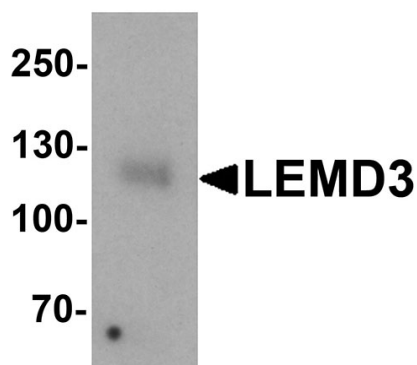
Background

LEMD3 Antibody: LEMD3 (LEM domain-containing 3) is a lem-domain containing protein, also known as MAN1, whose loss of function results in disorders characterized by osteopoikilosis, Buschke-Ollendorff syndrome, and melorheostosis. LEMD3 is an inner nuclear membrane protein that interacts with BMP and activin-TGF-beta receptor-activated Smads and antagonizes TGF-beta signaling in human cells.

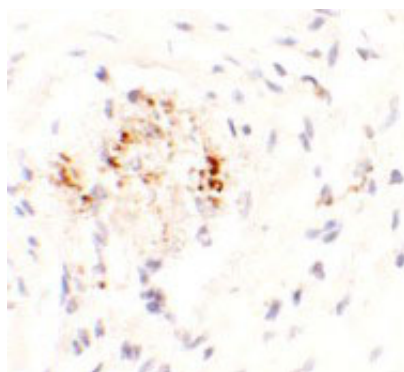
References

Hellemans J, Preobrazhenska O, Willaert A, et al. Loss-of-function mutations in LEMD3 result in osteopoikilosis, Buschke-Ollendorff syndrome, and melorheostosis. *Nat. Genet.* 2004; 36:1213-8.

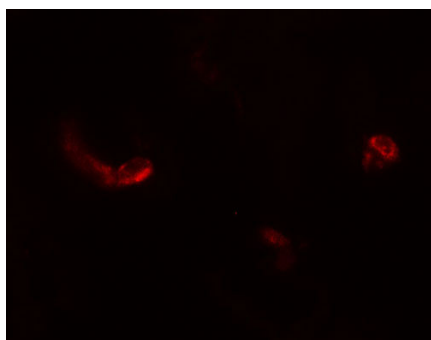
Images



Western blot analysis of LEMD3 in human colon tissue lysate with LEMD3 antibody at 1 $\mu\text{g/mL}$.



Immunohistochemistry of LEMD3 in human colon tissue with LEMD3 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of LEMD3 in human colon tissue with LEMD3 antibody at 5 $\mu\text{g/mL}$.

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