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

EMD Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2051a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P50402
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8F5A8
Isotype	IgG1
Calculated MW	28994
Description	Emerin is a serine-rich nuclear membrane protein and a member of the nuclear lamina-associated protein family. It mediates membrane anchorage to the cytoskeleton. Dreifuss-Emery muscular dystrophy is an X-linked inherited degenerative myopathy resulting from mutation in the emerin gene.
Immunogen	Purified recombinant fragment of human EMD (AA: 1-222) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	2010
Other Names	Emerin, EMD, EDMD, STA
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EMD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EMD
Synonyms	EDMD, STA
Function	Stabilizes and promotes the formation of a nuclear actin cortical network.

	Stimulates actin polymerization in vitro by binding and stabilizing the pointed end of growing filaments. Inhibits beta- catenin activity by preventing its accumulation in the nucleus. Acts by influencing the nuclear accumulation of beta-catenin through a CRM1- dependent export pathway. Links centrosomes to the nuclear envelope via a microtubule association. Required for proper localization of non- farnesylated prelamin-A/C. Together with NEMP1, contributes to nuclear envelope stiffness in germ cells (PubMed:32923640). EMD and BAF are cooperative cofactors of HIV-1 infection. Association of EMD with the viral DNA requires the presence of BAF and viral integrase. The association of viral DNA with chromatin requires the presence of BAF and EMD.
Cellular Location	Nucleus inner membrane; Single-pass membrane protein; Nucleoplasmic side. Nucleus outer membrane. Note=Colocalized with BANF1 at the central region of the assembling nuclear rim, near spindle-attachment sites. The accumulation of different intermediates of prelamin-A/C (non-farnesylated or carboxymethylated farnesylated prelamin-A/C) in fibroblasts modify its localization in the nucleus
Tissue Location	Skeletal muscle, heart, colon, testis, ovary and pancreas

References

1.Histopathology. 2009 Apr;54(5):571-9.2.J Cell Biol. 2007 Sep 10;178(6):897-904.

Images