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 # AO2052a

## Product Information

| | |
|---|---|
| **Application** | WB, FC, ICC, E |
| **Primary Accession** | P50402 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 8F5G2 |
| **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 *** (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 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