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

Laforin Antibody
Laforin Antibody, Clone S84-37
Catalog # ASM10298

Specification

Laforin Antibody - Product Information

Application	**WB, ICC**
Primary Accession	O95278
Other Accession	NP_001018051.1
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human**
Clonality	**Monoclonal**

Description
Mouse Anti-Human Laforin Monoclonal IgG1

Target/Specificity
Detects ~40kDa.

Other Names
EPM2 Antibody, Epilepsy progressive myoclonus type 2 Lafora disease (laforin) Antibody, Epilepsy progressive myoclonus type 2A Lafora disease (laforin) Antibody, EPM2 Antibody, Epm2a Antibody, Lafora PTPase Antibody, LAFPTPase Antibody, LD Antibody, LDE Antibody, MELF Antibody

Immunogen
Fusion protein amino acids 1-331 (full-length) of human Laforin. Rat: 90% identity (296/327 amino acids identical). Mouse: 89% identity (295/327 amino acids identical)

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-466 was sufficient for detection of Laforin in 20 µg of human brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Endoplasmic Reticulum

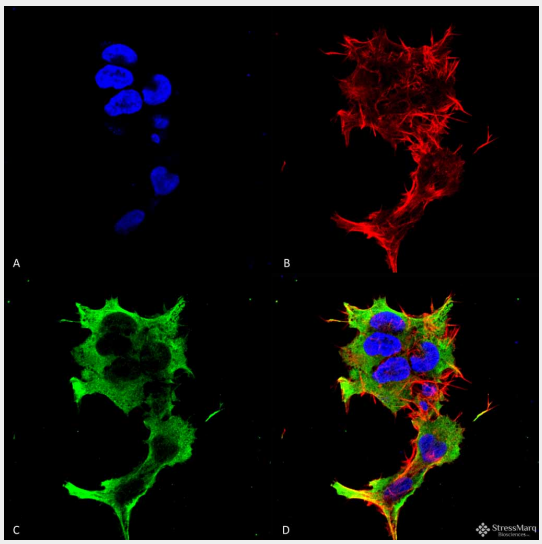
Laforin Antibody - Protocols

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

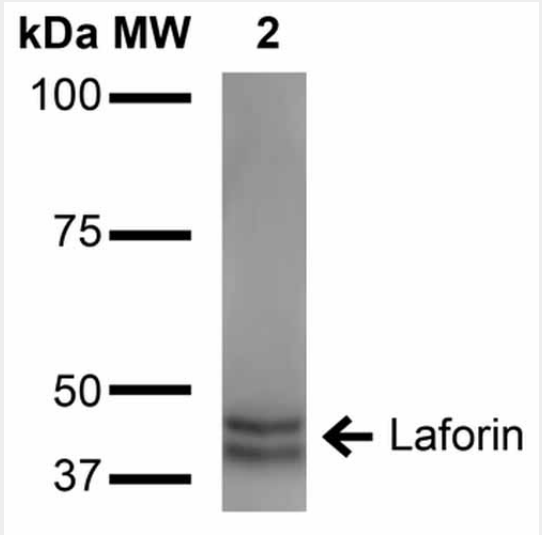
- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Laforin Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Laforin Monoclonal Antibody, Clone S84-37 (ASM10298). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Laforin Monoclonal Antibody (ASM10298) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Endoplasmic Reticulum. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Laforin Antibody (D) Composite.



Western Blot analysis of Human Hippocampus showing detection of ~40 kDa and 45 kDa Laforin protein using Mouse Anti-Laforin Monoclonal Antibody, Clone S84-37 (ASM10298). Lane 1: Molecular Weight (MW) Ladder. Lane 2: Human Hippocampus. Load: 15 µg. Block: 2% BSA and 2%

Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Laforin Monoclonal Antibody (ASM10298) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~40 kDa and 45 kDa.

Laforin Antibody - Background

Laforin, also known as Lafora PTPase, is a dual specificity protein phosphatase. Laforin is involved in the control of glycogen metabolism, specifically in preventing the formation of poorly branched glycogen molecules (polyglucosans). Laforin forms a complex with NHLRC1/malin and HSP70 that suppresses the cellular toxicity of misfolded proteins by promoting their degradation through the ubiquitin-proteasome system (UPS). Laforin is expressed in heart, skeletal muscle, kidney, pancreas and brain. Defective Laforin is linked to progressive myoclonic epilepsy type 2 (EPM2).