

#### Laforin Antibody

Laforin Antibody, Clone S84-37 Catalog # ASM10298

### Specification

# Laforin Antibody - Product Information

Application Primary Accession Other Accession Host Isotype Reactivity Clonality **Description** Mouse Anti-Human Laforin Monoclonal IgG1 WB <u>095278</u> <u>NP\_001018051.1</u> Mouse IgG1 Human Monoclonal

#### **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, 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)

-20°C

Purification Protein G Purified

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

Shipping TemperatureBlue Ice or 4°CCertificate of Analysis1 μg/ml of SMC-466 was sufficient for detection of Laforin in 20 μg of human brain lysate by<br/>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.

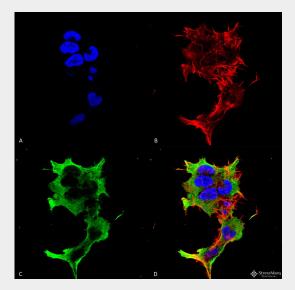
• <u>Western Blot</u>

Blocking Peptides

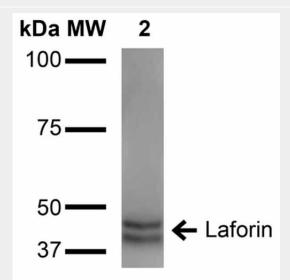


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### 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  $\mu$ g. 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).