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

Malin Antibody
Malin Antibody, Clone S85-18
Catalog # ASM10278

Specification

Malin Antibody - Product Information

Application	**WB**
Primary Accession	Q6VVB1
Other Accession	NP_940988.2
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human**
Clonality	**Monoclonal**

Description
Mouse Anti-Human Malin Monoclonal IgG1

Target/Specificity
Detects ~42kDa.

Other Names
E3 ubiquitin-protein ligase NHLRC1 Antibody, NHLRC 1 Antibody, NHL repeat containing 1 Antibody, EPM2A Antibody, EPM2B Antibody, MGC119262 Antibody, MGC119264 Antibody, MGC119265 Antibody, NHL repeat containing protein 1 Antibody

Immunogen
Fusion protein amino acids 2-125 (N-terminus encompassing RING domain) of human Malin. 86% identical to rat, and 77% identical to mouse.

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-444 was sufficient for detection of malin in 20 µg of transiently (malin) transfected COS cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Endoplasmic Reticulum | Nucleus

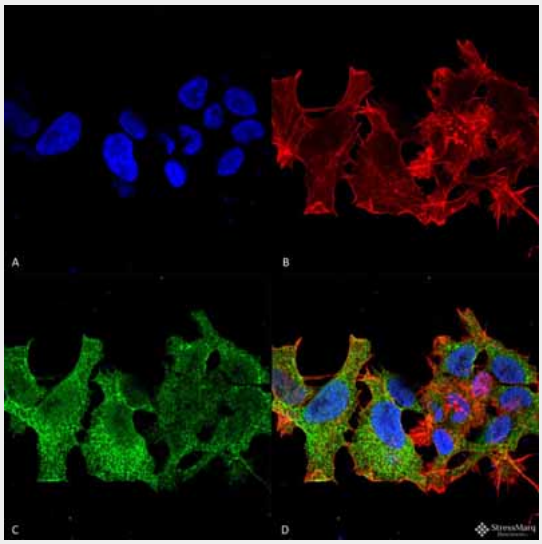
Malin Antibody - Protocols

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

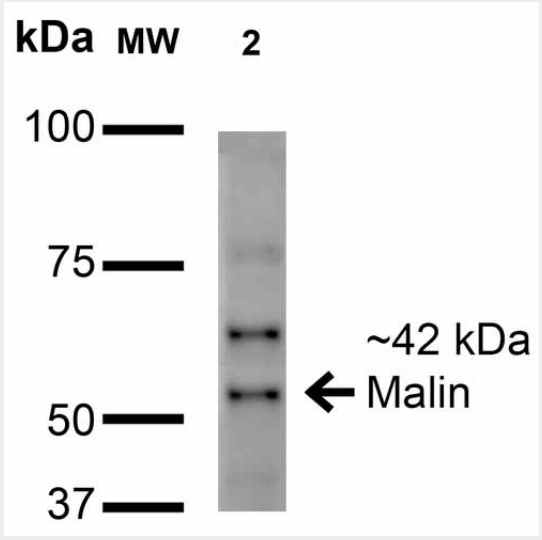
- Western Blot

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

Malin Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Malin Monoclonal Antibody, Clone S85-18 (ASM10278). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Malin Monoclonal Antibody (ASM10278) 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 60min RT, 5min RT. Localization: Cytoplasm, Endoplasmic Reticulum. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Malin Antibody (D) Composite.



Western Blot analysis of Monkey COS cells transfected with flag-tagged Malin showing detection of ~42 kDa Malin protein using Mouse Anti-Malin Monoclonal Antibody, Clone S85-18 (ASM10278).

Lane 1: Molecular Weight Ladder. Lane 2: Monkey COS cells transfected with flag-tagged Malin. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Malin Monoclonal Antibody (ASM10278) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~42 kDa.

Malin Antibody - Background

Progressive myoclonic epilepsy type 2 (EPM2), also called Lafora disease, is an autosomal recessive disease characterized by grand mal seizures and/or myoclonus at about 15 years of age. Rapid and severe mental deterioration follows, often with psychotic features. Survival is less than 10 years after onset. Starch-like, endoplasmic reticulum-associated polyglucosans, called Lafora bodies, can be observed in brain, muscle, liver and heart. One cause of Lafora disease is due to mutations in NHLRC1, the gene encoding Malin. Forty-nine different mutations in NHLRC1 have been shown to cause EPM2. Malin, also called NHL repeat-containing protein 1, is a single subunit E3 ubiquitin ligase, containing 6 NHL repeats and 1 RING-type zinc finger. Malin's RING domain is responsible for its ability to mediate ubiquitination. Malin interacts with and polyubiquitinates Laforin, a protein also implicated in EPM2. Malin localizes to the endoplasmic reticulum and, to a lesser extent, in the nucleus. Malin is expressed in
brain, cerebellum, spinal cord, medulla, heart, liver, skeletal muscle and pancreas.

Malin Antibody - References

1. Chan E.M, et al. (2003) Nat. Genet. 35:125-127.
2. Worby C.A, et al. (2008) J. Biol. Chem. 283:4069-4076.
3. Gomez-Abad C, et al. (2005) Neurology. 64:982-986.