

### LAR/PTPRF Antibody

LAR/PTPRF Antibody, Clone S165-38 Catalog # ASM10277

### Specification

### LAR/PTPRF Antibody - Product Information

Application **Primary Accession** Other Accession Host Isotype Reactivity Clonality Description Mouse Anti-Human LAR/PTPRF Monoclonal IgG2a

WB P10586 NP 002831.2. Mouse lqG2a Human, Mouse, Rat **Monoclonal** 

#### **Target/Specificity**

Detects ~85kDa (full length protein is 210 kDa - smaller due to proteolysis into P-subunit containing transmembrane and intracellular domains.

#### **Other Names**

FLJ43335 Antibody, FLJ45062 Antibody, FLJ45567 Antibody, LAR Antibody, LAR protein Antibody, LARFN5C Antibody, LARS Antibody, LCA homolog Antibody, Leukocyte antigen related (LAR) PTP receptor Antibody, Leukocyte antigen related Antibody, Leukocyte antigen related PTP receptor Antibody, Leukocyte antigen related tyrosine phosphatase Antibody, Leukocyte common antigen related Antibody, Protein Tyrosine Phosphatase Receptor Type F Antibody, Protein tyrosine phosphatase receptor type F polypeptide Antibody, PTPRF protein Antibody, Receptor linked phosphatase LAR Antibody, Receptor type tyrosine protein phosphatase F Antibody, Receptor type tyrosine protein phosphatase F precursor Antibody, Receptor-type tyrosine-protein phosphatase F Antibody

#### Immunogen

Fusion protein amino acids 1315-1607 (cytoplasmic C-terminus) of human LAR. 97% identical in both rat and mouse. >80% identity with PTPRD and PTPRS. >50% identity with PTPRM and PTPRK.

**Purification** Protein G Purified

Storage **Storage Buffer** PBS pH 7.4, 50% glycerol, 0.1% sodium azide -20ºC

Shipping Temperature

Blue Ice or 4°C

**Certificate of Analysis** 

1 μg/ml of SMC-443 was sufficient for detection of LAR/PTPRF in 20 μg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization** Membrane

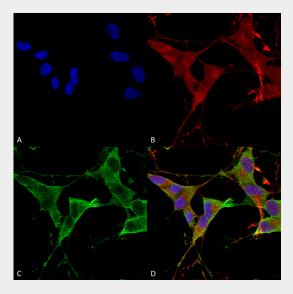


## LAR/PTPRF Antibody - Protocols

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

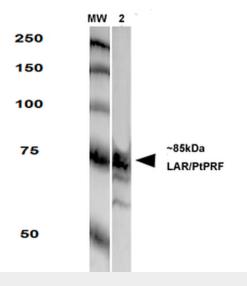
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# LAR/PTPRF Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-LAR/PTPRF Monoclonal Antibody, Clone N165/38 (ASM10277). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-LAR/PTPRF Monoclonal Antibody (ASM10277) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) LAR/PTPRF Antibody (D) Composite.





Western Blot analysis of Rat Brain Membrane showing detection of LAR protein using Mouse Anti-LAR Monoclonal Antibody, Clone N165/38 (ASM10277). Primary Antibody: Mouse Anti-LAR Monoclonal Antibody (ASM10277) at 1:250.

# LAR/PTPRF Antibody - Background

PTPRF or leukocyte common antigen-related protein (LAR) is a widely expressed protein tyrosine phosphatase with an extracellular receptor region that resembles a cell adhesion molecule. PTPRF removes phosphate group from  $\beta$ -catenin, an event that may subsequently facilitate cell-cell adhesion and ensure the stability of the cadherin complex. This phosphatase has also been implicated in various cellular processes such as neurite growth, nerve regeneration, actin remodeling and regulation of insulin function (1,2,3,4). Anti-PTPRF (C-terminal) antibody is specific for the extracellular and cytoplasmic subunits of human PTPRF (approx. 210, 150 and 85 kDa). Detection of the PTPRF bands by immunoblotting is specifically inhibited by the immunizing peptide.

# LAR/PTPRF Antibody - References

- 1. Streuli M. M., et al. (1992) EMBO Journal, 11(3), 897-907.
- 2. Mooney R.A. and C.M LeVea. (2003) Current Topics in Medicinal Chemistry, 3(7), 809-819.
- 3. Chagnon M.J., et al. (2004) Biochemistry and Cell Biology, 82(6), 664-675.
- 4. Ahmad F.F., and B.J. Goldstein (1997) Journal of Biological Chemistry, 272(1), 448-457.