

### **INPP5F Antibody**

INPP5F Antibody, Clone S166A-26 Catalog # ASM10296

### **Specification**

### **INPP5F Antibody - Product Information**

Application
Primary Accession
Other Accession
Host

Isotype Reactivity Clonality

Description

Mouse Anti-Human INPP5F Monoclonal IgG1

**Target/Specificity** 

Detects ~100kDa. Cross-reacts with INPP5b.

**Other Names** 

EC 3.1.3.36 Antibody, Inositol polyphosphate 5 phosphatase OCRL 1 Antibody, Inositol polyphosphate 5 phosphatase OCRL1 Antibody, Inositol polyphosphate 5-phosphatase OCRL-1 Antibody, INPP5F Antibody, LOCR Antibody, Lowe oculocerebrorenal syndrome protein Antibody, NPHL2 Antibody, OCRL 1 Antibody, OCRL Antibody, OCRL 1 Antibody, Oculocerebrorenal syndrome of Lowe Antibody, Phosphatidylinositol polyphosphate 5 phosphatase Antibody

ICC/IF, WB

NP 000267.2

**Monoclonal** 

Human, Mouse, Rat

001968

Mouse

IqG1

### Immunogen

Fusion protein amino acids 1-901 (full-length) of human INPP5F. Rat: 93% identity (845/904 amino acids identical). Mouse: 91% identity (824/901 amino acids identical) ~50% identity with INPP5b.

#### **Purification**

Protein G Purified

Storage -20°C

**Storage Buffer** 

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

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis** 

1  $\mu$ g/ml of SMC-464 was sufficient for detection of INPP5F in 20  $\mu$ g of COS cells transiently transformed with GFP-tagged OCLR lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

## **Cellular Localization**

Cytoplasmic Vesicle | Endosome | Endosome Membrane | Membrane | Golgi Apparatus

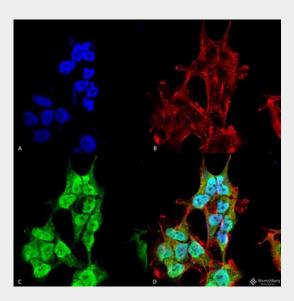
## **INPP5F Antibody - Protocols**

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

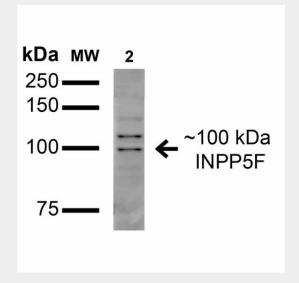


- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **INPP5F Antibody - Images**



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-INPP5F Monoclonal Antibody, Clone S166A-26 (ASM10296). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-INPP5F Monoclonal Antibody (ASM10296) 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: Cytoplasmic Vesicle, Endosome, Endosome Membrane, Membrane, Golgi Apparatus, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) INPP5F Antibody (D) Composite.



Western Blot analysis of Monkey COS cells transfected with GFP-tagged OCRL showing detection





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of ~100 kDa INPP5F protein using Mouse Anti-INPP5F Monoclonal Antibody, Clone S166A-26 (ASM10296). Lane 1: Molecular Weight Ladder. Lane 2: Monkey COS cells transfected with GFP-tagged OCRL. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-INPP5F Monoclonal Antibody (ASM10296) 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: ~100 kDa.

## INPP5F Antibody - Background

Inositol polyphosphate 5-phosphatase OCRL-1 (INPP5F/OCRL) is also called Lowe oculocerebrorenal syndrome protein. INPP5F is a phosphotase that converts phosphatidylinositol 4,5-bisphosphate to phosphatidylinositol 4-phosphate, as well as inositol 1,4,5-trisphosphate to inositol 1,4-bisphosphate and inositol 1,3,4,5-tetrakisphosphate to inositol 1,3,4-trisphosphate. ORCL is involved in primary cilia assembly and may also have a role in lysosomal membrane trafficking. ORCL is expressed in brain, skeletal muscle, heart, kidney, lung, placenta, fibroblasts, retina and the retinal pigment epithelium. INPP5F defects can cause Lowe oculocerebrorenal syndrome (OCRL) and Dent disease type 2 (DD2).