

OCRL Antibody (clone 4A6)
Mouse Monoclonal Antibody
Catalog # ALS14393**Specification**

OCRL Antibody (clone 4A6) - Product Information

Application	WB
Primary Accession	Q01968
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	104kDa KDa

OCRL Antibody (clone 4A6) - Additional Information**Gene ID** 4952**Other Names**

Inositol polyphosphate 5-phosphatase OCRL-1, 3.1.3.36, Lowe oculocerebrorenal syndrome protein, OCRL, INPP5F, OCRL1

Target/Specificity

Human OCRL

Reconstitution & Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

OCRL Antibody (clone 4A6) is for research use only and not for use in diagnostic or therapeutic procedures.

OCRL Antibody (clone 4A6) - Protein Information**Name** OCRL ([HGNC:8108](#))**Synonyms** OCRL1 {ECO:0000303|Ref.2}**Function**

Catalyzes the hydrolysis of the 5-position phosphate of phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P₂) and phosphatidylinositol-3,4,5-bisphosphate (PtdIns(3,4,5)P₃), with the greatest catalytic activity towards PtdIns(4,5)P₂ (PubMed:7761412, PubMed:15474001, PubMed:9430698, PubMed:10764818). Able also to hydrolyze the 5-phosphate of inositol 1,4,5-trisphosphate and of inositol 1,3,4,5-tetrakisphosphate (PubMed:7761412, PubMed:25869668).

Regulates traffic in the endosomal pathway by regulating the specific pool of phosphatidylinositol 4,5-bisphosphate that is associated with endosomes (PubMed:21971085). Involved in primary cilia assembly (PubMed:22228094, PubMed:22543976). Acts as a regulator of phagocytosis, hydrolyzing PtdIns(4,5)P2 to promote phagosome closure, through attenuation of PI3K signaling (PubMed:22072788).

Cellular Location

Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:D3ZGS3}. Early endosome membrane. Membrane, clathrin-coated pit. Cell projection, cilium, photoreceptor outer segment. Cell projection, cilium. Cytoplasmic vesicle {ECO:0000250|UniProtKB:D3ZGS3}. Endosome. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:D3ZGS3}. Lysosome Note=Also found on macropinosomes (PubMed:25869668). Colocalized with APPL1 on phagosomes (PubMed:22072788).

Tissue Location

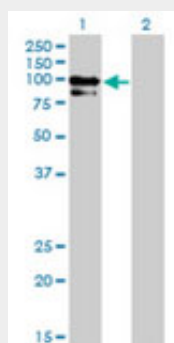
Brain, skeletal muscle, heart, kidney, lung, placenta and fibroblasts. Expressed in the retina and the retinal pigment epithelium.

OCRL Antibody (clone 4A6) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

OCRL Antibody (clone 4A6) - Images



Western blot of OCRL expression in transfected 293T cell line by OCRL monoclonal antibody ALS14393.

OCRL Antibody (clone 4A6) - Background

Converts phosphatidylinositol 4,5-bisphosphate to phosphatidylinositol 4-phosphate. Also converts inositol 1,4,5- trisphosphate to inositol 1,4-bisphosphate and inositol 1,3,4,5- tetrakisphosphate to inositol 1,3,4-trisphosphate. May function in lysosomal membrane trafficking by regulating the

specific pool of phosphatidylinositol 4,5-bisphosphate that is associated with lysosomes. Involved in primary cilia assembly.

OCRL Antibody (clone 4A6) - References

Attree O.,et al.Nature 358:239-242(1992).

Attree O.,et al.Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.

Nussbaum R.L.,et al.Hum. Genet. 99:145-150(1997).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Ross M.T.,et al.Nature 434:325-337(2005).