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OCRL Polyclonal Antibody

Catalog # AP71411

Product Information

Application	WB, E
Primary Accession	Q01968
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	104205

Additional Information

Gene ID	4952
Other Names	OCRL; INPP5F; OCRL1; Inositol polyphosphate 5-phosphatase OCRL-1; Lowe oculocerebrorenal syndrome protein
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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:10764818, PubMed:15474001, PubMed:7761412, PubMed:9430698). Also, is able to hydrolyze the 5-phosphate of inositol 1,4,5-trisphosphate and of inositol 1,3,4,5-tetrakisphosphate (PubMed:15474001, PubMed:40969890, PubMed:7761412). 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).

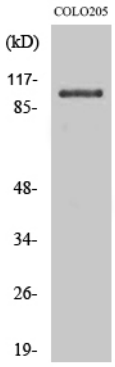
Tissue Location

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

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 (PubMed:25869668, PubMed:7761412, PubMed:9430698). 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 (PubMed:22228094, PubMed:22543976).

Images



Western Blot analysis of various cells using OCRL Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.