

Aipl1 Antibody
Catalog # ASC10790**Specification**

Aipl1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	O9NZN9
Other Accession	NP_055151 , 74272276
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Aipl1 antibody can be used for detection of Aipl1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

Aipl1 Antibody - Additional Information

Gene ID	23746
Target/Specificity	
AIPL1;	

Reconstitution & Storage

Aipl1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

Aipl1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Aipl1 Antibody - Protein Information

Name AIPL1

Synonyms AIPL2

Function

May be important in protein trafficking and/or protein folding and stabilization.

Cellular Location

Cytoplasm. Nucleus

Tissue Location

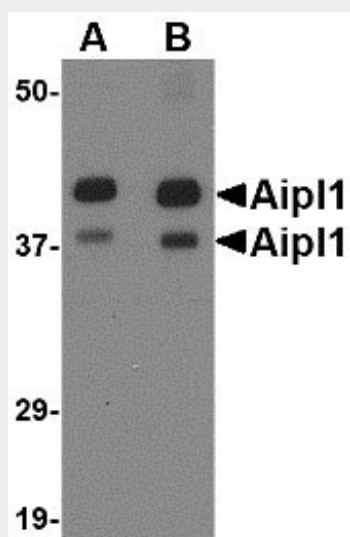
Highly expressed in retina. Specifically localized to the developing photoreceptor layer and within the photoreceptors of the adult retina.

Aipl1 Antibody - Protocols

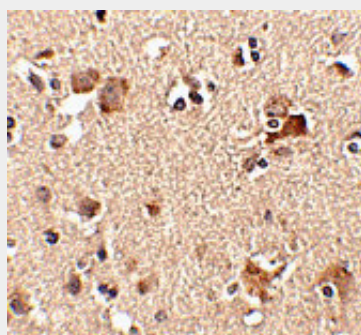
Provided below are standard protocols that you may find useful for product applications.

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

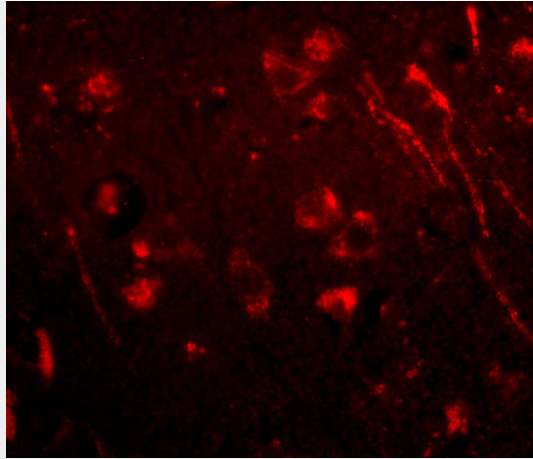
Aipl1 Antibody - Images



Western blot analysis of Aipl1 in rat brain tissue lysate with Aipl1 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of Aipl1 in human brain tissue with Aipl1 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of aipl1 in human brain tissue with aipl1 antibody at 20 µg/mL.

Aipl1 Antibody - Background

Aipl1 Antibody: Aipl1 was initially identified as a protein implicated in Leber congenital amaurosis (LCA), an autosomal recessive disorder thought to be caused by the abnormal development of photoreceptors. Aipl1 is a tetratricopeptide repeat protein that is highly homologous to ARA9, a protein involved in the HSP90-mediated nuclear translocation and transactivation of the aryl hydrocarbon receptor. Aipl1 has also been found to function as part of a chaperone heterocomplex, interacting with Hsp90 and Hsp70. Aipl1 also associates with the cell cycle regulator NUB1. It is thought that Aipl1 cooperates with Hsp70 but not Hsp90 to suppress the formation of NUB1 inclusions, and these interactions are necessary in the normal photoreceptor maturation, as mutations that lead to LCA also compromise the interactions with the Hsp chaperones. At least three isoforms of Aipl1 are known to exist.

Aipl1 Antibody - References

Sohocki MM, Brown SJ, Sullivan LS, et al. Mutations in a new photoreceptor-pineal gene on 17p cause Leber congenital amaurosis. *Nat. Genet.*2000; 24:79-83.
Ma Q and Whitlock JP Jr. A novel cytoplasmic protein that interacts with the Ah receptor, contains tetratricopeptide repeat motifs, and augments the transcriptional response to 2,3,7,8-tetrachloro-dibenzo-p-dioxin. *J. Biol. Chem.*1997; 272:8878-84.
Hidalgo-de-Quintana J, Evans RJ, Cheetham ME, et al. The Leber congenital amaurosis protein aipl1 functions as part of a chaperone complex. *Invest. Ophthalmol. Vis. Sci.*2008; 49:2878-87.
Akey DT, Zhu X, Dyer M, et al. The inherited blindness associated protein Aipl1 interacts with the cell cycle regulator protein NUB1. *Hum. Mol. Genet.*2002; 11:2723-33.