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Aipl1 Antibody

Catalog # ASC10786

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NZN9
Other Accession	NP_055151, 74272276
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	43903
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Aipl1 antibody can be used for detection of Aipl1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	23746
Other Names	Aryl-hydrocarbon-interacting protein-like 1, AIPL1, AIPL2
Target/Specificity	AIPL1;
Reconstitution & Storage	Aipl1 antibody can be stored at 4℃ for three months and -20℃, 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.

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.

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.

References

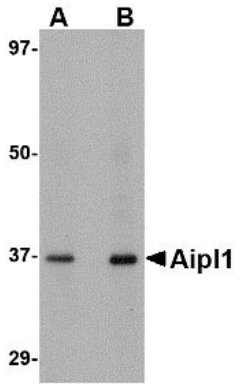
Sohocki MM, Brown SJ, Sullivan LS, et al. Mutations in a new photoreceptor-pineal gene on 17p cause Leber congenital amaurosis. Nat. Genet.2000; 24:79-83.

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.

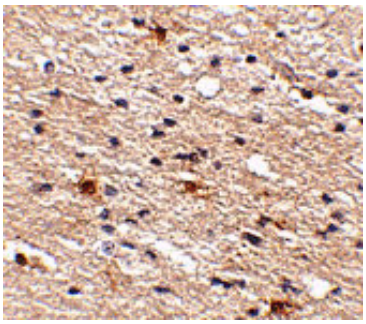
Hidalgo-de-Quintana J, Evans RJ, Cheetham ME, et al. The Leber congenital amaurosis protein aipl1 functions as part of a chaperone complex. Invest. Ophthalmol. Vis. Sci.2008; 49:2878-87.

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.

Images

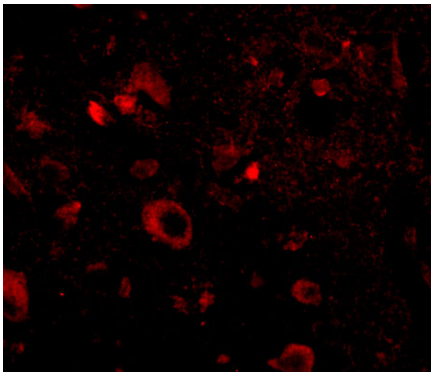


Western blot analysis of Aipl1 in human brain tissue lysate with Aipl1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of Aipl1 in human brain tissue with Aipl1 antibody at 2.5 µg/mL.

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



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