

AIPL1 Antibody (monoclonal) (M04)**Mouse monoclonal antibody raised against a full-length recombinant AIPL1.****Catalog # AT1078a****Specification**

AIPL1 Antibody (monoclonal) (M04) - Product Information

Application	WB, IHC, IF, E
Primary Accession	O9NZN9
Other Accession	BC012055
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	43903

AIPL1 Antibody (monoclonal) (M04) - Additional Information**Gene ID** 23746**Other Names**

Aryl-hydrocarbon-interacting protein-like 1, AIPL1, AIPL2

Target/Specificity

AIPL1 (AAH12055, 1 a.a. ~ 384 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IHC~~1:100~500

IF~~1:50~200

E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

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

Precautions

AIPL1 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

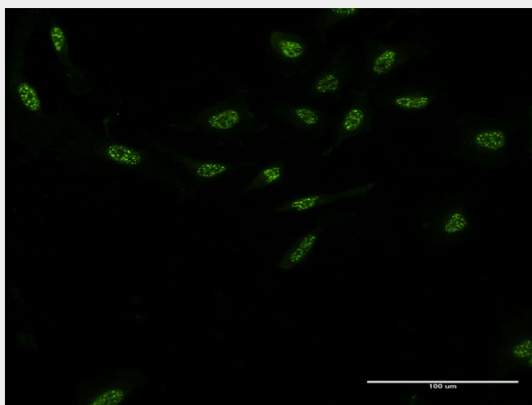
AIPL1 Antibody (monoclonal) (M04) - Protocols

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

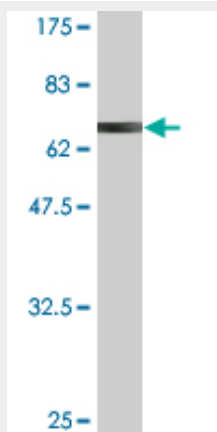
- [Western Blot](#)

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

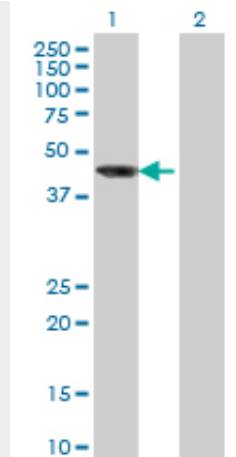
AIPL1 Antibody (monoclonal) (M04) - Images



Immunofluorescence of monoclonal antibody to AIPL1 on HeLa cell . [antibody concentration 10 ug/ml]



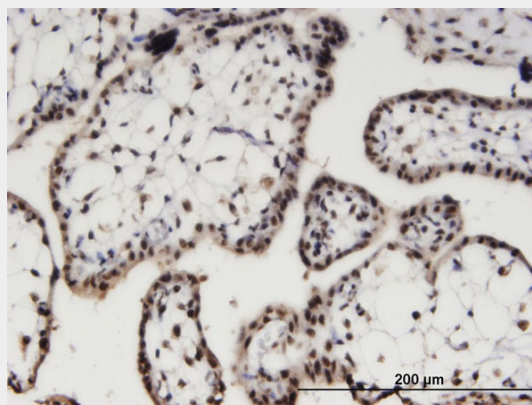
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (67.98 KDa) .



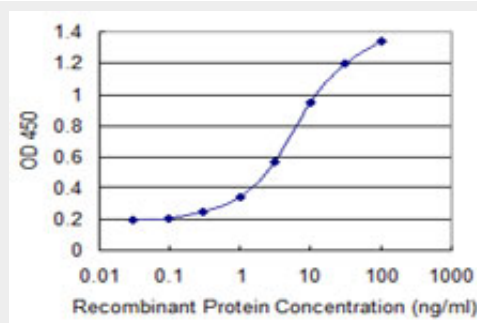
Western Blot analysis of AIPL1 expression in transfected 293T cell line by AIPL1 monoclonal antibody (M04), clone 1E1.

Lane 1: AIPL1 transfected lysate(43.9 KDa).

Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to AIPL1 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged AIPL1 is 0.1 ng/ml as a capture antibody.

AIPL1 Antibody (monoclonal) (M04) - Background

Leber congenital amaurosis (LCA) accounts for at least 5% of all inherited retinal disease and is the most severe inherited retinopathy with the earliest age of onset. Individuals affected with LCA are diagnosed at birth or in the first few months of life with severely impaired vision or blindness, nystagmus and an abnormal or flat electroretinogram. The photoreceptor/pineal -expressed gene, AIPL1, encoding aryl-hydrocarbon interacting protein-like 1, was mapped within the LCA4 candidate

region. The protein contains three tetratricopeptide motifs, consistent with nuclear transport or chaperone activity. AIPL1 mutations may cause approximately 20% of recessive LCA.

AIPL1 Antibody (monoclonal) (M04) - References

The Leber congenital amaurosis protein, AIPL1, is needed for the viability and functioning of cone photoreceptor cells. Kirschman LT, et al. Hum Mol Genet, 2010 Mar 15. PMID 20042464. Differential macular morphology in patients with RPE65-, CEP290-, GUCY2D-, and AIPL1-related Leber congenital amaurosis. Pasadhika S, et al. Invest Ophthalmol Vis Sci, 2010 May. PMID 19959640. Mutations that are a common cause of Leber congenital amaurosis in northern America are rare in southern India. Sundaresan P, et al. Mol Vis, 2009 Sep 4. PMID 19753312. The Leber congenital amaurosis protein AIPL1 functions as part of a chaperone heterocomplex. Hidalgo-de-Quintana J, et al. Invest Ophthalmol Vis Sci, 2008 Jul. PMID 18408180. Identification of mutations in the AIPL1, CRB1, GUCY2D, RPE65, and RPGRIP1 genes in patients with juvenile retinitis pigmentosa. Booij JC, et al. J Med Genet, 2005 Nov. PMID 16272259.