

For Research Use Only

OPA1 Monoclonal antibody, PBS Only



Catalog Number: 66583-1-PBS

Featured Product

Basic Information

Catalog Number: 66583-1-PBS	GenBank Accession Number: BC075805	Purification Method: Protein A purification
Size: 100ug, Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 4976	CloneNo.: 1B2D8
Source: Mouse	UNIPROT ID: O60313	
Isotype: IgG2b	Full Name: optic atrophy 1 (autosomal dominant)	
Immunogen Catalog Number: AG26868	Calculated MW: 960 aa, 112 kDa	
	Observed MW: 100 kDa and 80-90 kDa	

Applications

Tested Applications:
WB, IHC, ELISA

Species Specificity:
Human, mouse, pig, rat

Background Information

OPA1 is a nuclear-encoded mitochondrial protein with similarity to dynamin-related GTPases. OPA1 localizes to the inner mitochondrial membrane and helps regulate mitochondrial stability and energy output. This protein also sequesters cytochrome c. OPA1 is associated with the inner membrane and protects cells from apoptosis by regulating inner membrane dynamics. Mutation of OPA1 causes the disease dominant optic atrophy, a degeneration of the retinal ganglion cells. OPA1 undergoes complex posttranscriptional regulation and posttranslational proteolysis. OPA1 is regulated by proteolytic cleavage, which degrades long OPA1 isoforms into short isoforms. The gene OPA1 can be cleaved into some chains with MW 100 kDa and 80-90 kDa.

Storage

Storage:
Store at -20°C. Stable for one year after shipment.

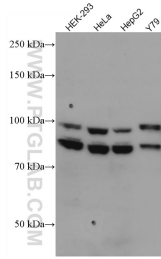
Storage Buffer:
PBS only

Aliquoting is unnecessary for -20°C storage

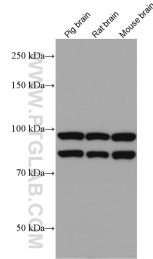
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

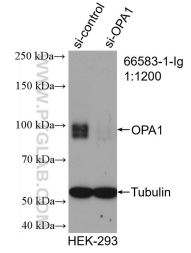
Selected Validation Data



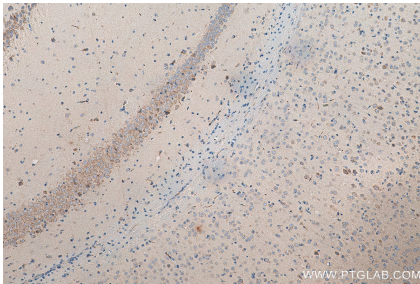
Various lysates were subjected to SDS PAGE followed by western blot with 66583-1-Ig (OPA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66583-1-PBS in a different storage buffer formulation.



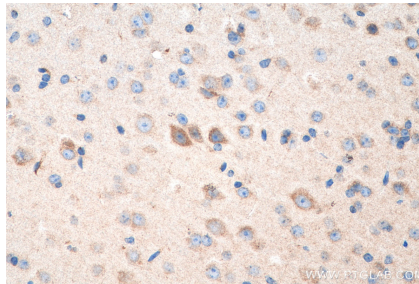
Various lysates were subjected to SDS PAGE followed by western blot with 66583-1-Ig (OPA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66583-1-PBS in a different storage buffer formulation.



WB result of OPA1 antibody (66583-1-Ig; 1:1200; incubated at room temperature for 1.5 hours) with sh-Control and sh-OPA1 transfected HEK-293 cells. This data was developed using the same antibody clone with 66583-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66583-1-Ig (OPA1 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66583-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66583-1-Ig (OPA1 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66583-1-PBS in a different storage buffer formulation.