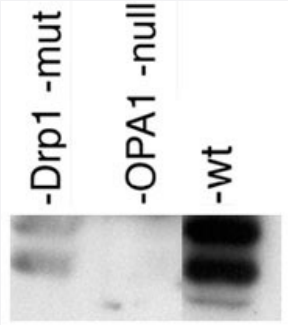
OPA1 polyclonal antibody

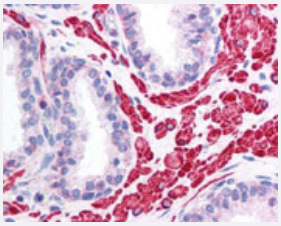
Catalog # PAB12083 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of OPA1 in post-nuclear extracts of mouse embryonic fibroblasts with OPA1 polyclonal antibody (Cat # PAB12083).



Immunohistochemistry

Immunohistochemical staining of OPA1 on prostatic smooth muscle and glandular epithelium with OPA1 polyclonal antibody (Cat # PAB12083).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of OPA1.
Immunogen	A synthetic peptide corresponding to amino acids 500-600 of human OPA1.
Host	Rabbit
Reactivity	Chicken, Human, Mouse, Primates, Rat, Zebra fish
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

Recommend Usage	Western Blot (2 ug/mL) Immunohistochemistry (2.5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris-glycine, 150 mM NaCl (0.05% sodium azide)
Storage Instruction	Store at -20°C or -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of OPA1 in post-nuclear extracts of mouse embryonic fibroblasts with OPA1 polyclonal antibody (Cat # PAB12083).

- Immunohistochemistry

  Immunohistochemical staining of OPA1 on prostatic smooth muscle and glandular epithelium with OPA1 polyclonal antibody (Cat # PAB12083).

Gene Info — OPA1

Entrez GeneID	4976
Protein Accession#	O60313
Gene Name	OPA1
Gene Alias	FLJ12460, KIAA0567, MGM1, NPG, NTG, largeG
Gene Description	optic atrophy 1 (autosomal dominant)
Omim ID	125250 165500 605290 606657
Gene Ontology	Hyperlink
Gene Summary	This gene product is a nuclear-encoded mitochondrial protein with similarity to dynamin-related G TPases. It is a component of the mitochondrial network. Mutations in this gene have been associa ted with optic atrophy type 1, which is a dominantly inherited optic neuropathy resulting in progres sive loss of visual acuity, leading in many cases to legal blindness. Multiple transcript variants enc oding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000195065|mitochondrial dynamin-like GTPase|optic atrophy 1

Publication Reference

- Lipids activate skeletal muscle mitochondrial fission and quality control networks to induce insulin resistance in humans.

  Christopher L Axelrod, Ciaran E Fealy, Melissa L Erickson, Gangarao Davuluri, Hisashi Fujioka, Wagner S Dantas, Emily Huang, Kathryn Pergola, Jacob T Mey, William T King, Anny Mulya, Daniel Hsia, Bartolome Burguera, Bernard Tandler, Charles L Hoppel, John P Kirwan.

  Metabolism: Clinical and Experimental 2021 Jun; 121:154803.

  Application: WB-Ti, Human, Human skeletal muscle specimens

- Exercise Training Remodels Human Skeletal Muscle Mitochondrial Fission and Fusion Machinery Towards a Pro-Elongation Phenotype.

  Axelrod CL, Fealy CE, Mulya A, Kirwan JP.

  Acta Physiologica 2018 Nov; e13216.

  Application: WB-Ti, Human, Skeletal muscle

- Effect of Roux-en-Y gastric bypass on liver mitochondrial dynamics in a rat model of obesity.

  Sacks J, Mulya A, Fealy CE, Huang H, Mosinski JD, Pagadala MR, Shimizu H, Batayyah E, Schauer PR, Brethauer SA, Kirwan JP.

  Physiological Reports 2018 Apr; 6:1.

  Application: WB-Ce, Rat, Liver homogenates

Disease

- Genetic Predisposition to Disease
- Glaucoma
- Leber hereditary optic neuropathy
- Low Tension Glaucoma
- Ocular Hypertension
- Optic Atrophies
- Optic Atrophy