



# OPA1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-07820
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	OPA1 KIAA0567
<b>Protein Name</b>	Dynamin-like 120 kDa protein, mitochondrial (Optic atrophy protein 1) [Cleaved into: Dynamin-like 120 kDa protein, form S1]
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	OPA1 Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	105kD
<b>Cell Pathway</b>	Mitochondrion inner membrane ; Single-pass membrane protein . Mitochondrion intermembrane space . Mitochondrion membrane . Detected at contact sites between endoplasmic reticulum and mitochondrion membranes. .
<b>Tissue Specificity</b>	Highly expressed in retina. Also expressed in brain, testis, heart and skeletal muscle. Isoform 1 expressed in retina, skeletal muscle, heart, lung, ovary, colon, thyroid gland, leukocytes and fetal brain. Isoform 2 expressed in colon, liver, kidney, thyroid gland and leukocytes. Low levels of all isoforms expressed in a variety of tissues.
<b>Function</b>	disease:Defects in OPA1 are a cause of optic atrophy type 1 (OPA1) [MIM:165500]. OPA1 is a dominantly inherited optic neuropathy occurring in 1 in 50,000 individuals that features progressive loss in visual acuity leading, in many cases, to legal blindness.,disease:Defects in OPA1 are the cause of optic atrophy 1 and deafness [MIM:125250]. Some individuals with mutations in OPA1 manifest also ophthalmoplegia and myopathy.,function:Dynamin-related GTPase required for mitochondrial fusion and regulation of apoptosis. May form a diffusion barrier for proteins stored in mitochondrial cristae. Proteolytic processing in response to intrinsic apoptotic signals may lead to disassembly of OPA1 oligomers and release of the caspase activator cytochrome C (CYCS) into the mitochondrial intermembrane space.,PTM:PARL-dependent proteolytic processing releases an



antiapoptotic soluble form not required f

## Background

This gene product is a nuclear-encoded mitochondrial protein with similarity to dynamin-related GTPases. It is a component of the mitochondrial network. Mutations in this gene have been associated with optic atrophy type 1, which is a dominantly inherited optic neuropathy resulting in progressive loss of visual acuity, leading in many cases to legal blindness. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009],

## matters needing attention

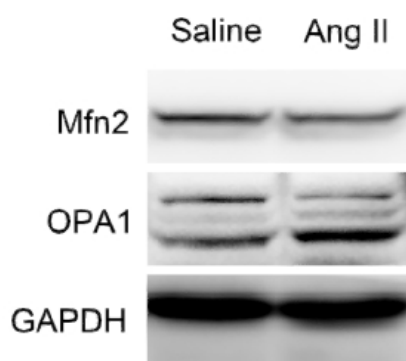
Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images

(I)



Sirt6 deficiency contributes to mitochondrial fission and oxidative damage in podocytes via ROCK1-Drp1 signalling pathway  
Guohua Ding

CELL PROLIFERATION  
WB Human