



OPA1 Polyclonal Antibody

Catalog No	YP-Ab-07820
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	OPA1 KIAA0567
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	OPA1 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Dynamin-like GTPase OPA1;long form;mitochondrial;OPA1;OPA1 KIAA0567; Dynamin-like 120 kDa protein;mitochondrial (Optic atrophy protein 1) [Cleaved into: Dynamin-like 120 kDa protein;form S1]
Observed Band	105kD
Calculated Molecular Weight	105kD
Cell Pathway	Mitochondrion inner membrane ; Single-pass membrane protein . Mitochondrion intermembrane space . Mitochondrion membrane . Detected at contact sites between endoplasmic reticulum and mitochondrion membranes. .
Tissue Specificity	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.
Function	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

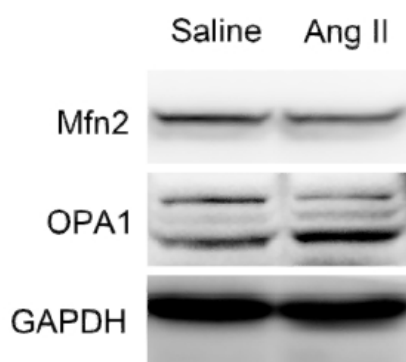
Avoid repeated freezing and thawing!

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