OPA1 Monoclonal Antibody

Catalog No	BYmab-07820
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	OPA1 KIAA0567
Protein Name	Dynamin-like 120 kDa protein, mitochondrial (Optic atrophy protein 1) [Cleaved into: Dynamin-like 120 kDa protein, form S1]
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	OPA1 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	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