ARG58978
anti-OPA1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes OPA1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	OPA1
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 661-960 of Human OPA1 (NP_056375.2).
Conjugation	Un-conjugated
Alternate Names	Dynamin-like 120 kDa protein, mitochondrial; NPG; Optic atrophy protein 1; EC 3.6.5.5; MGM1; NTG; largeG

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	SKOV3
Observed Size	112 kDa

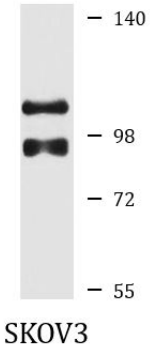
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	OPA1
Gene Full Name	optic atrophy 1 (autosomal dominant)
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]
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. May also play a role in mitochondrial genome maintenance. Dynamin-like 120 kDa protein, form S1: Inactive form produced by cleavage at S1 position by OMA1 following stress conditions that induce loss of mitochondrial membrane potential, leading to negative regulation of mitochondrial fusion. [UniProt]
Calculated Mw	112 kDa
PTM	PARL-dependent proteolytic processing releases an antiapoptotic soluble form not required for mitochondrial fusion. Cleaved by OMA1 at position S1 following stress conditions. [UniProt]
Cellular Localization	Mitochondrion inner membrane, Mitochondrion intermembrane space, Single-pass membrane protein. [UniProt]

Images



ARG58978 anti-OPA1 antibody WB image

Western blot: 25 µg of SKOV3 cell lysate stained with ARG58978 anti-OPA1 antibody at 1:1000 dilution.