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Anti-OPA1 Antibody (aa901-950)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18375

Specification

Anti-OPA1 Antibody (aa901-950) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	O60313
Predicted	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**111631**

Anti-OPA1 Antibody (aa901-950) - Additional Information

Gene ID 4976

Alias Symbol	**OPA1**

Other Names
OPA1, KIAA0567, MGM1, LargeG, NPG, NTG, Optic atrophy protein 1

Target/Specificity
OPA1 antibody detects endogenous levels of OPA1.

Reconstitution & Storage
Immunoaffinity purified

Precautions
Anti-OPA1 Antibody (aa901-950) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-OPA1 Antibody (aa901-950) - Protein Information

Name OPA1

Function
Dynamin-related GTPase that is essential for normal mitochondrial morphology by regulating the equilibrium between mitochondrial fusion and mitochondrial fission (PubMed:16778770, PubMed:17709429, PubMed:20185555, PubMed:24616225, PubMed:28746876). Coexpression of isoform 1 with shorter alternative products is required for optimal activity in promoting mitochondrial fusion (PubMed:17709429). Binds lipid membranes enriched in negatively charged phospholipids, such as cardiolipin, and promotes membrane tubulation (PubMed:<a

href="http://www.uniprot.org/citations/20185555" target="_blank">20185555). The intrinsic GTPase activity is low, and is strongly increased by interaction with lipid membranes (PubMed:20185555). Plays a role in remodeling cristae and the release of cytochrome c during apoptosis (By similarity). 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 (By similarity). Plays a role in mitochondrial genome maintenance (PubMed:20974897, PubMed:18158317).

Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein. Mitochondrion intermembrane space {ECO:0000250|UniProtKB:P58281}. Mitochondrion membrane. Note=Detected at contact sites between endoplasmic reticulum and mitochondrion membranes

Tissue Location
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.

Anti-OPA1 Antibody (aa901-950) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-OPA1 Antibody (aa901-950) - Images