

## DATASHEET

# OPA1 Rabbit Monoclonal Antibody(C1630)

CAT. NO. AMA01242

### KEY FEATURES

Target	OPA1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Dynamin-related GTPase that is essential for normal mitochondrial morphology by mediating fusion of the mitochondrial inner membranes, regulating cristae morphology and maintaining respiratory chain function . Exists in two forms: the transmembrane, long form (Dynamin-like GTPase OPA1, long form; L-OPA1), which is tethered to the inner mitochondrial membrane, and the short soluble form (Dynamin-like GTPase OPA1, short form; S-OPA1), which results from proteolytic cleavage and localizes in the intermembrane space . Both forms (L-OPA1 and S-OPA1) cooperate to catalyze the fusion of the mitochondrial inner membrane .

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to OPA1
Specificity	Recognizes endogenous levels of OPA1 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human OPA1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 111 kD; Observed: 100 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	KIAA0567; Dynamin-like 120 kDa protein mitochondrial; Optic atrophy protein 1
Gene Symbol	OPA1
Entrez Gene	4976(Human); 171116(Rat)
SwissProt	O60313(Human); Q2TA68(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

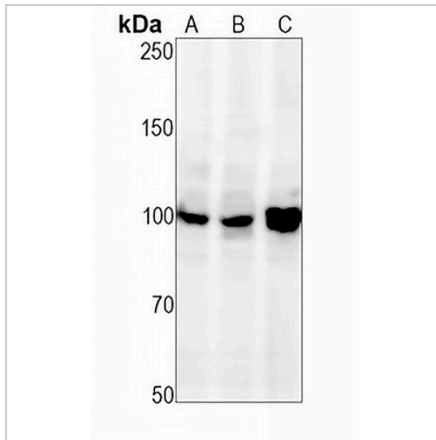
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

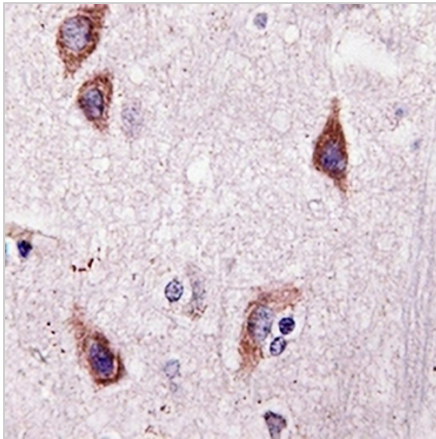
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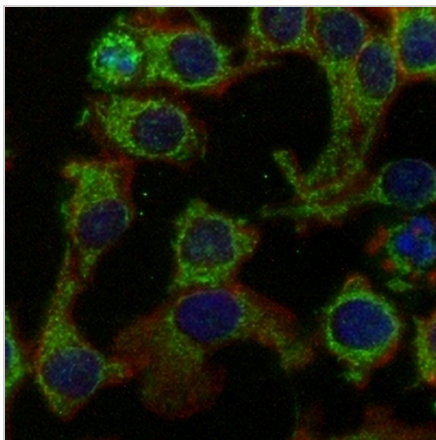
**DATA**



Western blot analysis of OPA1 expression in A2780 (A), A375 (B), HUT78 (C) whole cell lysates. (Predicted band size: 111 kD; Observed band size: 100 kD)



Immunohistochemical analysis of OPA1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of OPA1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.