


### Anti-OPA1 antibody ab42364

★★★★★ [7 Abreviews](#) [125 References](#) [3 图像](#)

#### 概述

产品名称	Anti-OPA1抗体
描述	兔多克隆抗体to OPA1
宿主	Rabbit
经测试应用	适用于: WB, IP
种属反应性	与反应: Mouse, Rat, Human 预测可用于: Chicken, Orangutan 
免疫原	Synthetic peptide within Rat OPA1 aa 900 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. (Peptide available as <a href="#">ab42363</a> )
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS  Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified
克隆	多克隆

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab42364于以下的经测试应用

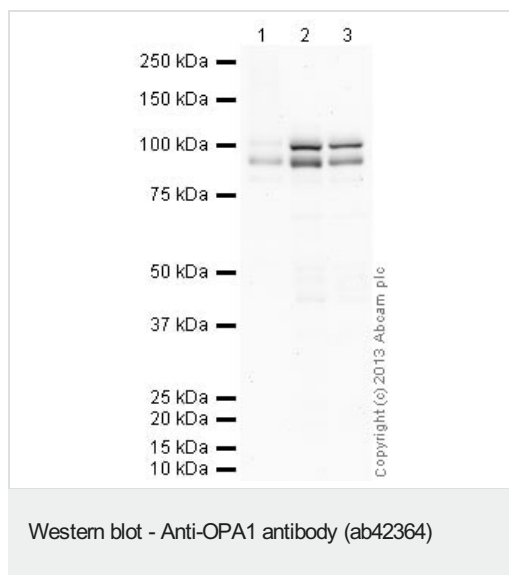
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★☆ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 92,86 kDa (predicted molecular weight: 111 kDa). Abcam recommends using milk as the blocking agent.
IP		Use at an assay dependent concentration.

靶标

功能	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.
组织特异性	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.
疾病相关	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. Defects in OPA1 are the cause of optic atrophy 1 with deafness (OPA1D) [MIM:125250]. Some individuals with mutations in OPA1 manifest also ophthalmoplegia and myopathy.
序列相似性	Belongs to the dynamin family.
翻译后修饰	PARL-dependent proteolytic processing releases an antiapoptotic soluble form not required for mitochondrial fusion.
细胞定位	Mitochondrion inner membrane. Mitochondrion intermembrane space.

图片



**All lanes :** Anti-OPA1 antibody (ab42364) at 1 µg/ml

**Lane 1 :** Human brain tissue lysate - total protein ([ab29466](#))

**Lane 2 :** Brain (Mouse) Tissue Lysate

**Lane 3 :** Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

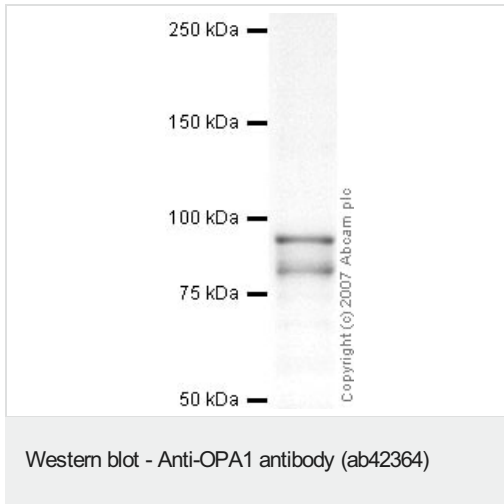
**Predicted band size:** 111 kDa

**Observed band size:** 92 kDa

**Additional bands at:** 100 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 2 minutes

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Anti-OPA1 antibody (ab42364) at 1 µg/ml + Brain (Rat) Tissue Lysate - normal tissue at 10 µg

### Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

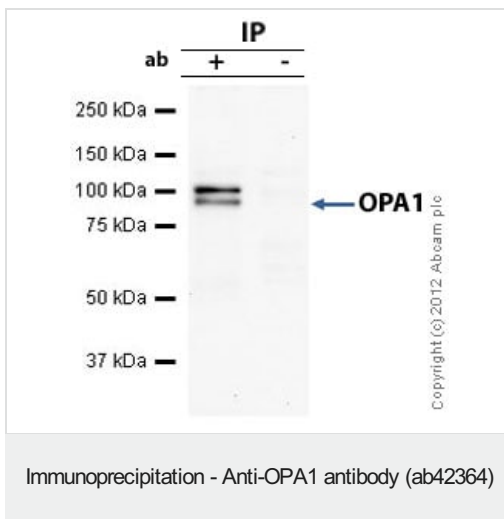
Performed under reducing conditions.

**Predicted band size:** 111 kDa

**Observed band size:** 92 kDa

**Additional bands at:** 86 kDa (possible isoform)

Although the predicted band size is ~111 kDa based on Swiss-prot data, bands of 92 kDa and 86 kDa has been previously observed. Investigative Ophthalmology & Visual Science, November 2005, Vol. 46, No. 11



OPA1 was immunoprecipitated using 0.5mg Rat Brain whole tissue lysate, 5µg of Rabbit polyclonal to OPA1 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, rat brain whole tissue lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab42364.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 92kDa: OPA1; non specific - 100kDa: We are unsure as to the identity of this extra band.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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