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OMA1 Polyclonal Antibody

(Catalog #A67094)

Background
Metalloprotease that is part of the quality control system in the inner membrane of mitochondria. Following stress conditions that induce loss of mitochondrial membrane potential, mediates cleavage of OPA1 at S1 position, leading to OPA1 inactivation and negative regulation of mitochondrial fusion. May also cleave UQCC3 under these conditions. Its role in mitochondrial quality control is essential for regulating lipid metabolism as well as to maintain body temperature and energy expenditure under cold-stress conditions.

Description
OMA1 Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation
0.03% Proclin 300, 50% Glycerol, 0.01M PBS, PH 7.4

Specificity
Human

Isotype
IgG

Uniprot ID
Q96E52

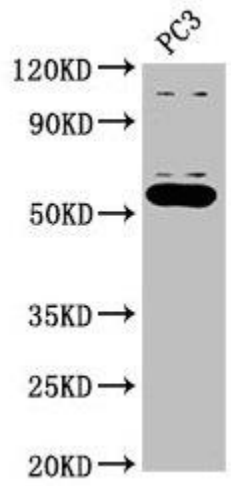
Purification
>95%, Protein G purified

Immunogen
Recombinant Human Metalloendopeptidase OMA1, mitochondrial protein (22-194AA)

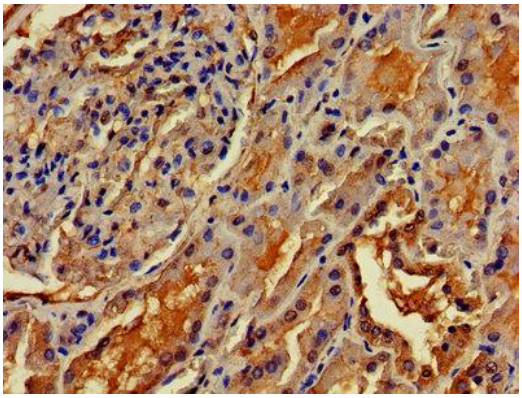
Storage
Shipped at 4°C. Upon delivery aliquot and store at -20°C (short-term) or -80°C (long-term). Avoid repeated freeze.

Alternative Names
Metalloendopeptidase OMA1, mitochondrial, Metalloprotease-related protein 1, MPRP-1, Overlapping with the m-AAA protease 1 homolog, OMA1, MPRP1

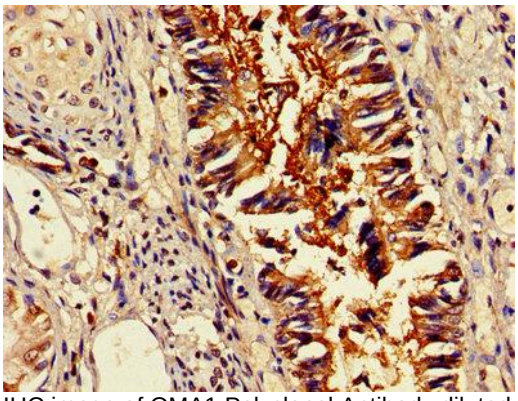
Application
ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:200-1:500, IF:1:50-1:200



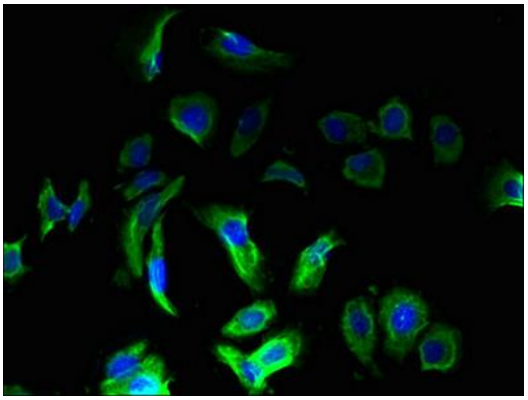
Western Blot
Positive WB detected in: PC-3 whole cell lysate
All lanes: OMA1 Polyclonal Antibody at 2.7ug/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 61, 56 kDa
Observed band size: 56 kDa



IHC image of OMA1 Polyclonal Antibody diluted at 1:400 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of OMA1 Polyclonal Antibody diluted at 1:400 and staining in paraffin-embedded human lung tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of MCF-7 cells with OMA1 Polyclonal Antibody at 1:133, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

