

For Research Use Only

ATP7A-Specific Polyclonal antibody

Catalog Number:55375-1-AP



Basic Information

Catalog Number:

55375-1-AP

Size:

150ul , Concentration: 880 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_000052

GeneID (NCBI):

538

UNIPROT ID:

Q04656

Full Name:

ATPase, Cu⁺⁺ transporting, alpha polypeptide

Calculated MW:

165 kDa

Observed MW:

170 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IP, ELISA

Species Specificity:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : unboiled mouse lung tissue,

IP : mouse lung tissue,

IHC : human lung cancer tissue,

Background Information

ATPase copper transporting alpha(ATP7A) is a type of transmembrane P-type ATPase for copper transport. ATP7A and ATP7B are homologous genes responsible for copper transport across cell membranes. ATP7A transports copper ions from the Golgi membrane to copper-dependent enzymes (such as dopamine β -hydroxylase) in the secretory pathway. When copper ion concentrations rise, ATP7A relocates from the Golgi apparatus to the plasma membrane, promoting copper efflux and thereby protecting cells from copper toxicity. Mutations in ATP7A are associated with Menkes disease (MNK)(PMID: 28389643, 30341172).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

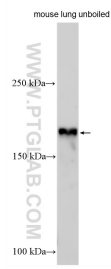
For technical support and original validation data for this product please contact:

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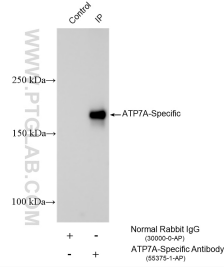
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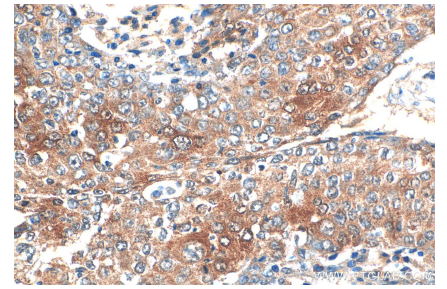
Selected Validation Data



Unboiled mouse lung tissue were subjected to SDS PAGE followed by western blot with 55375-1-AP (ATP7A-Specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



IP result of anti-ATP7A-Specific (IP:55375-1-AP, 4ug; Detection:55375-1-AP 1:500) with mouse lung tissue lysate 1520 ug.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 55375-1-AP (ATP7A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).