

For Research Use Only

# USB1 Polyclonal antibody

Catalog Number: 21229-1-AP



## Basic Information

Catalog Number:

21229-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG15689

GenBank Accession Number:

BC004415

GeneID (NCBI):

79650

UNIPROT ID:

Q9BQ65

Full Name:

chromosome 16 open reading frame

57

Calculated MW:

265 aa, 30 kDa

Observed MW:

31 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:4000

## Applications

Tested Applications:

WB, ELISA

Species Specificity:

human

Positive Controls:

WB: A549 cells, Calu-1 cells, HeLa cells, Jurkat cells, K-562 cells

## Background Information

USB1 (U6 snRNA biogenesis phosphodiesterase 1) is a key nuclease primarily located within the nucleus and responsible for RNA processing. Its most well-defined function is to catalyze the hydrolysis of the 2',3'-cyclic phosphate at the 3' end of the U6 small nuclear RNA (snRNA), generating an essential 3'-hydroxyl group. This process is crucial for spliceosome assembly and pre-mRNA splicing. Mutations in the USB1 gene directly cause cartilaginous-hair hypoplasia, a rare autosomal recessive genetic disorder. Affected individuals present with short-limbed dwarfism, sparse hair, immunodeficiency, and bone marrow failure, revealing the critical roles of USB1 in skeletal development, cell cycle regulation, and immune system function. Therefore, USB1 is not only a core factor in RNA metabolism but also an important disease-associated protein.

## 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

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

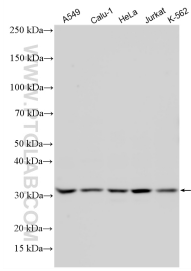
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W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 21229-1-AP (USB1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.