

For Research Use Only

USB1 Polyclonal antibody, PBS Only

Catalog Number: 21229-1-PBS



Basic Information

Catalog Number:

21229-1-PBS

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

Applications

Tested Applications:

WB, Indirect ELISA

Species Specificity:

human

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 -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

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

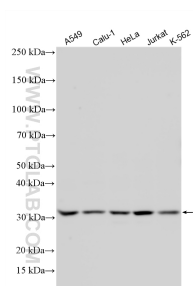
T: 4006900926

E: Proteintech-CN@ptglab.com

W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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. This data was developed using the same antibody clone with 21229-1-PBS in a different storage buffer formulation.