

For Research Use Only

USB1 Polyclonal antibody

Catalog Number: 21229-1-AP



Basic Information

Catalog Number: 21229-1-AP	GenBank Accession Number: BC004415	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 370 ug/ml by Nanodrop;	GeneID (NCBI): 79650	Recommended Dilutions: WB: 1:1000-1:4000
Source: Rabbit	UNIPROT ID: Q9BQ65	
Isotype: IgG	Full Name: chromosome 16 open reading frame 57	
Immunogen Catalog Number: AG15689	Calculated MW: 265 aa, 30 kDa	
	Observed MW: 31 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB: A549 cells, Calu-1 cells, HeLa cells, Jurkat cells, K-562 cells
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 -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

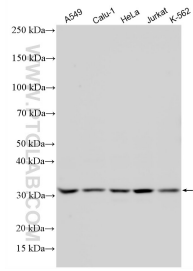
For technical support and original validation data for this product please contact:

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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.