

For Research Use Only

# NAT10 Recombinant antibody

Catalog Number: 82585-1-RR



## Basic Information

**Catalog Number:**

82585-1-RR

**Size:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG4184

**GenBank Accession Number:**

BC035558

**GeneID (NCBI):**

55226

**UNIPROT ID:**

Q9H0A0

**Full Name:**

N-acetyltransferase 10 (GCN5-related)

**Calculated MW:**

1025 aa, 116 kDa

**Observed MW:**

116 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

5B9

**Recommended Dilutions:**

WB 1:5000-1:50000

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

IF/ICC 1:1500-1:6000

## Applications

**Tested Applications:**

WB, IP, ELISA, IF/ICC

**Species Specificity:**

Human

**Positive Controls:**

**WB:** HeLa cells, A549 cells, HEK-293 cells, Jurkat cells, K-562 cells

**IP:** mouse testis tissue,

**IF/ICC:** HeLa cells,

## Background Information

NAT10 (N-acetyltransferase 10) is a nucleolar protein that is involved in regulation of telomerase activity, DNA damage response, and cytokinesis. It also plays a role in maintaining nuclear shape. Inhibition of NAT10 has been reported to rescue the misshapen nuclei in laminopathic cells via microtubule reorganization. The specificity of this antibody has been tested by siRNA (PMID: 24786082). NAT10 regulates mitotic cell fate by acetylating Eg5. NAT10 depletion results in multinuclear giant cells, which is the hallmark of mitotic catastrophe (PMID: 35210604). NAT10 plays a crucial role in carcinogenesis through influencing EMT, hypoxia, ribosomal biogenesis and overall, promoting translational efficiency. Recently, we reported that treating cancer cells with Remodelin, a small molecule inhibitor of NAT10, causes alteration in global lipid metabolism (PMID: 36149760).

## Storage

**Storage:**

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

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

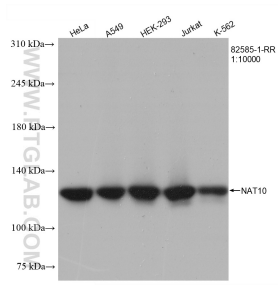
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

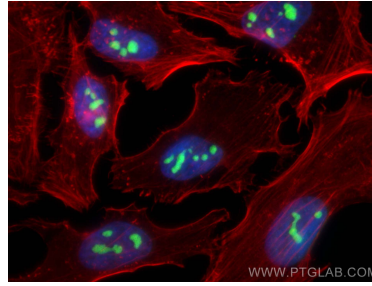
W: [ptgcn.com](http://ptgcn.com)

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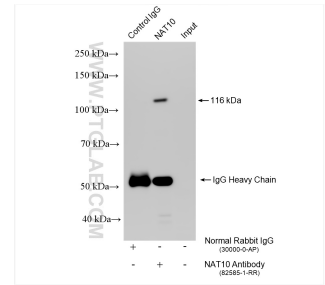
## Selected Validation Data



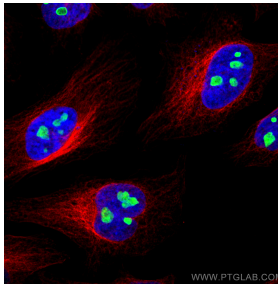
Various lysates were subjected to SDS PAGE followed by western blot with 82585-1-RR (NAT10 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



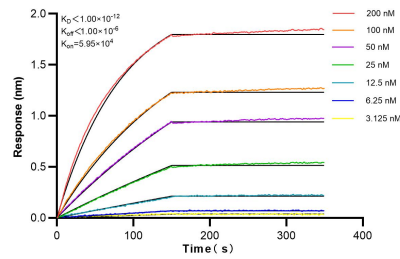
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using NAT10 antibody (82585-1-RR, Clone: 5B9) at dilution of 1:1900 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



IP result of anti-NAT10 (IP:82585-1-RR, 4µg; Detection:82585-1-RR 1:5000) with mouse testis tissue lysate 1120 µg.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using NAT10 antibody (82585-1-RR, Clone: 5B9) at dilution of 1:1900 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).



Biolayer interferometry (BLI) kinetic assays of 82585-1-RR against Human NAT10 were performed. The affinity constant is below 1 pM.