

# Anti-Nanos3 Antibody [PSH09-65]

HA723130



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, IF-Cell, IHC-P
<b>Molecular Wt:</b>	Predicted band size: 21 kDa
<b>Clone number:</b>	PSH09-65

**Description:** Plays a role in the maintenance of the undifferentiated state of germ cells regulating the spermatogonia cell cycle and inducing a prolonged transit in G1 phase. Affects cell proliferation probably by repressing translation of specific mRNAs. Maintains the germ cell lineage by suppressing both Bax-dependent and -independent apoptotic pathways. Essential in the early stage embryo to protect the migrating primordial germ cells (PGCs) from apoptosis.

**Immunogen:** Recombinant protein within human Nanos3 aa 1-192 (P60323-2).

**Subcellular location:** Nucleus, Cytoplasm, Stress granule, P-body.

**Database links:** SwissProt: P60323 Human

**Recommended Dilutions:**

<b>WB</b>	1:2,000
<b>IF-Cell</b>	1:500
<b>IHC-P</b>	1:2,000

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

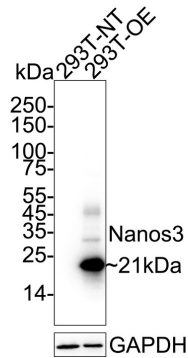
Service mail:support@huabio.cn

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## Images

**Fig1:** Western blot analysis of Nanos3 on different lysates with Rabbit anti-Nanos3 antibody (HA723130) at 1/2,000 dilution.

Lane 1: 293T transfected with empty control cell lysate  
Lane 2: 293T transfected with Nanos3 cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 21 kDa

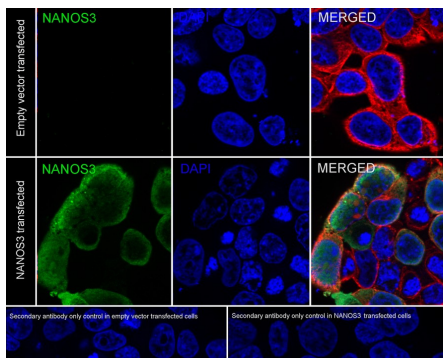
Observed band size: 21 kDa

Exposure time: 4 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA723130) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunocytochemistry analysis of 293T cells transfected with or without Nanos3 labeling Nanos3 with Rabbit anti-Nanos3 antibody (HA723130) at 1/500 dilution.



Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Nanos3 antibody (HA723130) at 1/500 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

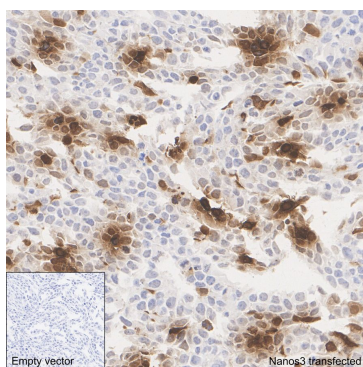
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**Fig3:** Immunohistochemical analysis of paraffin-embedded 293T cells transfected with or without Nanos3 with Rabbit anti-Nanos3 antibody (HA723130) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723130) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

1. Inoue H et al. NANOS3 suppresses premature spermatogonial differentiation to expand progenitors and fine-tunes spermatogenesis in mice. *Biol Open*. 2022 Apr
2. Wang J et al. Nanos3 knockout pigs to model transplantation and reconstruction of the germline. *Cell Prolif*. 2023 May

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