



## Monoclonal Anti-human Nanos2 Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB2870

**Clone:** 343255

**Lot Number:** XSW01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human Nanos2

**Immunogen:** *E. coli*-derived rhNanos2

**Ig class:** mouse IgG<sub>1</sub>

**Recommended Application:**  
Western blot

**Other Application:**  
Direct ELISA

### Background

Nanos2 is a cytoplasmic RNA-binding protein that belongs to the Nanos family of translational repressors. The 138 amino acid (aa) protein contains a 55 aa nanos-type zinc finger domain with two C2HC motifs. Human and mouse Nanos2 share identity 75% aa sequence identity overall but 95% within the zinc finger RNA binding domain. In the mouse, Nanos2 is located in male germ cells and is essential for spermatogenesis.

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant human Nanos homolog 2 (rhNanos2; aa 1 - 173; Accession # P60323). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody detects rhNanos2 in direct ELISAs and Western blots. In these formats, this antibody shows no cross-reactivity with rhNanos1.

### Applications

**Western blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human Nanos2. Using a colorimetric detection system, the detection limit for rhNanos2 is approximately 5 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human Nanos2. The detection limit for rhNanos2 is approximately 2.5 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**