



# Anti-Human Nanog

20150223ML



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P242</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human Nanog. Anti-Human Nanog specific antibody was purified by affinity chromatography employing immobilized human Nanog matrix.

## Target Background

<b>Synonyms (Target):</b>	NANOG
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Nanog is a regulatory protein that is associated with undifferentiated pluripotent cells. The expression of Nanog, which is suppressed in all adult tissues, is restricted to embryonic stem cells and to certain pluripotent cancer cells. Decreased expression of Nanog is strongly correlated with cell differentiation. Nanog, most likely, acts as an intracellular regulator, which maintains pluripotency and self renewal via a STAT3 independent pathway. Recombinant human Nanog is a 35 kDa protein, which is synthesized as a 304 amino acid polypeptide lacking a signal sequence for secretion.

### Database References Target

<b>Protein RefSeq:</b>	NP_079141.2
<b>Uniprot ID:</b>	Q9H9S0
<b>mRNA RefSeq:</b>	NM_024865

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant Human Nanog
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

**Western Blot:** To detect Nanog by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Nanog is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

### ELISA:

**Indirect:** To detect Nanog by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Nanog.

**Sandwich:** To detect Nanog by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with an appropriate secondary conjugated antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Nanog.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**