NEUROMICS

Nanog Data Sheet

Catalog Number:	RA19068	**Host:**	Rabbit
Product Type:	Affinity Purified	**Species Reactivity:**	Human
Immunogen Sequence:	Synthetic peptide comprising residues 281-296 [TRYFSTPQTMDLFLNY] of the human Nanog protein. Reactivity in other species unknown.	**Format:**	Liquid Concentration of 1mg/ml in PBS containing 0.02% sodium azide.

Applications: **Western Blot**: 1:1,000-1:2,000

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Publications:

Clark, A.T., Rodriguez, R.T., Bodnar, M.S., Abeyta, M.J., Cedars, M.I., Turek, P.J., Firpo, M.T. and Reijo Pera, R.A. Human STELLAR, NANOG, and GDF3 genes are expressed in pluripotent cells and map to chromosome 12p13, a hotspot for teratocarcinoma. (2004) *Stem Cells* 22:169-179

Mitsui, K., Tokuzawa,Y., Itoh, H., Segawa, K., Murakami, M., Takahashi, K., Maruyama, M., Maeda, M. and Yamanaka, S. The homeoprotein Nanog is required for maintenance of plurioteincy in mouse epiblast and ES cells. (2003) *Cell* 113:631-642

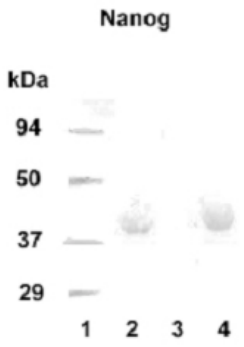
Storage: Maintain at +2-8°C for 3 months or at -20°C for longer periods. Stable for 1 year. *Avoid repeated freeze-thaw cycles.*

Application Notes

Description/Data:

The transcriptional factor Nanog functions in maintaining pluripotency in cooperation with other key genes such as Oct4. Oct4 and Sox2 bind to the Nanog promoter in mouse and human embryonic stem cell. Nanog levels allow stem cells to balance the creation of lineage-committed and undifferentiated cells.

Nanog-deficient ES cells lose pluripotency and differentiate into extraembryonic endoderm lineage. Thus it is one of the molecular markers suitable for recognizing the undifferentiated state of stem cells in the mouse and human. NANOG is a new marker for testicular carcinoma in situ and germ cell tumors.



Western blot detection of Nanog in 20 ug of human hippocampus tissue lysate (lanes 2 and 4) with Nanog polyclonal at 1:1000 dilution followed by AP-conjugated secondary at 1:5000 dilution. MW marker lane 1. Peptide absoprtion control lane 3.

FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com