

Nanos1 Antibody

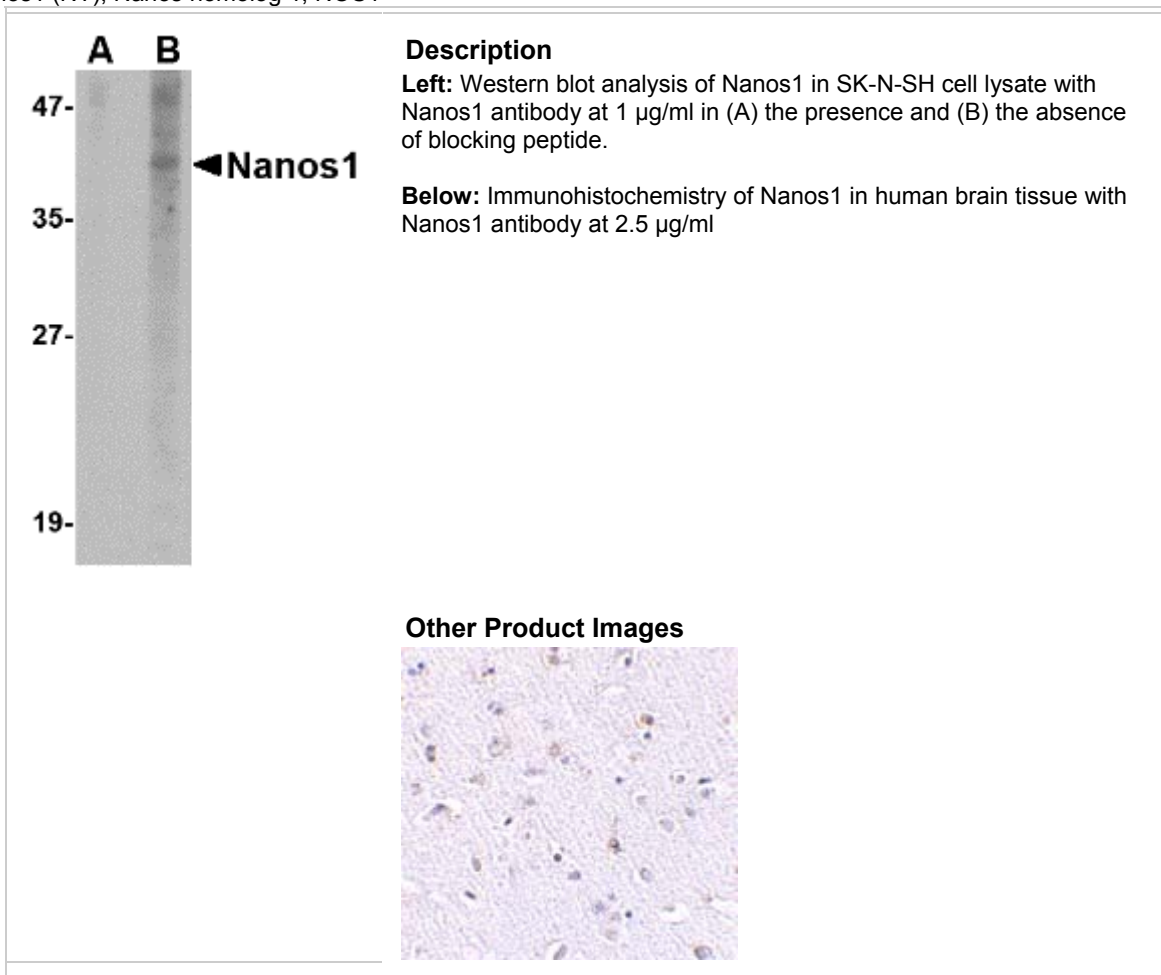
SIG-4683

Background

Nanos1 is one of three known mammalian homologs to the *Drosophila* gene *nanos*. Nanos1 is an RNA-binding protein containing a zinc-finger motif and is expressed in the developing nervous system and continues in the adult brain. Interestingly, unlike mice deficient in either *nanos2* or *nanos3*, mice lacking the *nanos1* gene develop normally with no sign of abnormalities. Recently it has been found that expression of *nanos1* mRNA is down-regulated by E-cadherin in a human breast cancer cell line and the amino-terminal domain on Nanos1 interacts with the E-cadherin-binding protein p120ctn. Furthermore, overexpression of Nanos1 in human colorectal DLD1 cancer cells functionally abolished cell-cell adhesion, allowing the cancer cells to develop strong migratory and invasive properties. These results suggest that targeting Nanos1 might prove an effective strategy in the treatment of E-cadherin-negative tumors.

Additional Names

Nanos1 (NT), Nanos homolog 1, NOS1



Source

Nanos1 antibody was raised against a 17 amino acid peptide from near the amino terminus of human Nanos1.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

Nanos1 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Application

Nanos1 antibody can be used for detection of Nanos1 by Western blot at 1 – 2 µg/ml.

Tested Application

E, WB, IHC

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

Nanos1 Peptide (contact Zyagen for availability)

Storage

Nanos1 antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Positive Control

SK-N-SH Cell Lysate (contact Zyagen for availability)

Species Reactivity

H

Protein GI Number

41688589

Protein Accession Number

Q8WY41

Short Description

(NT) Nanos homolog 1

References

1. Jaruleska J, Kotecki M, Kusz K, et al. Conservation of a Pumilio-Nanos complex from *Drosophila* germ plasm to human germ cells. *Dev. Genes Evol.* 2003; 213:120-6.
2. Tsuda M, Sasaoka Y, Kiso M, et al. Conserved role of nanos proteins in germ cell development. *Science* 2003; 301:1239-41.
3. Haraguchi S, Tsuda M, Kitajima S, et al. Nanos1: a mouse nanos gene expressed in the central nervous system is dispensable for normal development. *Mech. Dev.* 2003; 120:721-31.
4. Strumane K, Bonnomet A, Stove A, et al. E-cadherin regulates human Nanos1, which interacts with p120ctn and induces tumor cell migration and invasion. *Cancer Res.* 2006; 66:10007-15.

