# Medaysis

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## Rabbit Anti-Nanog [MD204R]: RM0180, RM0180RTU7

### Intended Use: For Research Use Only

**Description:** Nanog is a homeodomain-containing transcription factor that is involved in the maintenance of pluripotency and self renewal in embryonic stem cells. Nanog expression is controlled by a network of factors including Sox2 and the key pluripotency regulator Oct-4. Recent advances in somatic cell reprogramming have utilized viral expression of combinations of transcription factors including nanog, Oct-4, Sox2, KLF4, c-Myc, and LIN28. Studies show that Nanog expression can be absent in normal adult organ tissues, but presented in undifferentiated germ cell tumors such as seminoma, dysgerminoma and embryonal carcinoma. Nanog may be used as an aid in the determination of undifferentiated tumors of germ cell origin from non-germ cell tumors

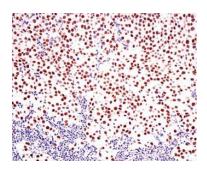
#### **Specifications:**

Description	Catalog No. Size
Package:	
Applications:	IHC, Flow Cyt., ICC/IF, WB
Storage:	Store at 2°- 8°C
Formulation:	Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3)
Localization:	Nucleus
Immunogen:	Synthetic peptide to residues near the amino terminus of human nanog protein
Reactivity:	Human
Isotype:	IgG
Source:	Rabbit
Clone:	MD204R
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Description	Catalog No.	Size	
Nanog Concentrated	RM0180	1 ml	
Nanog Prediluted	RM0180RTU7	7 ml	

#### **IHC Procedure\*:**

Positive Control Tissue:	Seminoma, dysgerminoma, embryonal carcinoma
Concentrated Dilution:	25-100
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes
	using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual
* Result should be confirmed by an	established diagnostic procedure.



FFPE human seminoma stained with anti-Nanog using DAB

#### **References:**

- 1. Cancer Stem Cell Subpopulations Are Present Within Metastatic Head and Neck Cutaneous Squamous Cell Carcinoma. Kilmister EJ, et al. Front Oncol 10:1091, 2020.
- 2. An extended transcriptional network for pluripotency of embryonic stem cells. Jonghwan Kim, et al., Cell. Mar 21;132(6):1049-61, 2008.
- 3. Induced pluripotent stem cell lines derived from human somatic cells. Junying Yu, et al., Science. Dec 21; 318(5858): 1917-20, 2007.

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