

Nanog Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
Nanog Concentrate	FP-A030-01	0.1 ml
Nanog Concentrate	FP-A030-10	1 ml
Nanog Predilute	FP-A030-70	7 ml

Description

Nanog is a homeoprotein that functions with pluripotent factors such as Oct4 and Sox2 to maintain embryonic stem cell pluripotency. Expression of this protein has been noted in seminoma, dysgerminoma, embryonal carcinoma, and other undifferentiated germ cell tumors, while nanog expression is absent in normal adult organ tissues. Anti-Nanog may be useful in distinguishing between undifferentiated germ cell tumors and non-germ cell tumors.

Specifications

Clone	IHC634
Source	Mouse Monoclonal
Applications	IHC (P)
Formulation	Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide

IHC Procedure*

Positive Control Tissue	Seminoma
Dilution Range	1:50 – 1:200
Pretreatment	Perform heat-induced epitope retrieval (HIER) at pH for 10 to 30 minutes
Incubation Time and Temp	10 to 30 minutes at room temperature
Detection	Refer to the corresponding user manual for detection system

Result

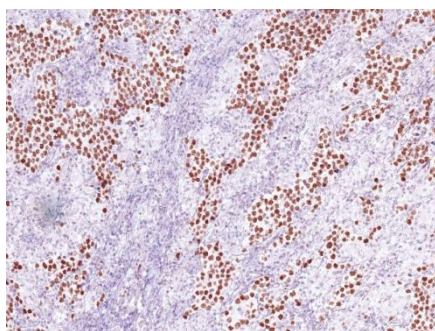


Figure. Nanog on Testicular Cancer

Storage and Handling

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

Precautions

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

References

1. **Mitsu K**, et al. “The homeoprotein Nanog is required for maintenance of pluripotency in mouse epiblast and ES cells.” *Cell*. 2003; 113:631-42.
2. **Chambers I**, et al. “Functional expression cloning of Nanog, a pluripotency sustaining factor in embryonic stem cells.” *Cell*. 2003; 113:643-55.
3. **Pan G**, et al. “Nanog and transcriptional networks in embryonic stem cell pluripotency.” *Cell Res*. 2007; 17:42-9.
4. **Hart AH**, et al. “The pluripotency homeobox gene NANOG is expressed in human germ cell tumors.” *Cancer*. 2005; 104:2092-98.
5. **Chang MC**, et al. “Embryonic stem cell transcription factors and D2-40 (podoplanin) as diagnostic immunohistochemical markers in ovarian germ cell tumors.” *Int J Gynecol Pathol*. 2009; 28:347-55.

Technical Support

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for assistance with more questions regarding this product.