

Oct-4 Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
Oct-4 Concentrate	FP-A088-01	0.1 ml
Oct-4 Concentrate	FP-A088-10	1 ml
Oct-4 Predilute	FP-A088-70	7 ml

Description

Octamer-Binding Transcription Factor 4 (Oct-4), also known as POU5F1 (POU Domain, Class 5, Transcription Factor 1), is a member of the POU homeodomain family of transcription factors and is involved in the maintenance and regulation of pluripotency in embryonic stem and germ cells. Anti-Oct-4 is highly useful and sensitive for seminomas, germinoma, dysgerminoma, embryonal carcinoma, and gonadoblastoma. Oct-4 may be associated with tumorigenesis, and can have an effect on some aspects of tumour behavior, including tumour recurrence or resistance to therapies.

Specifications

Clone	IHC643
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

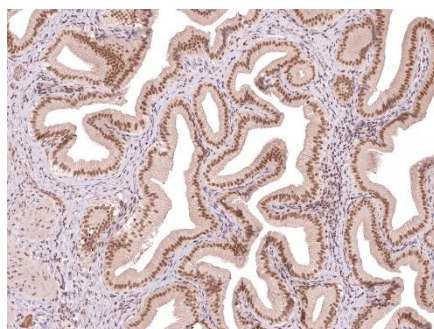


Figure. Oct-4 on Gallbladder

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. **Baker PM**, et al. "Immunohistochemistry as a tool in the differential diagnosis of ovarian tumors: an update." *Int J Gynecol Pathol.* 2005 Jan;24(1):39-55.
2. **Biermann K**, et al. "Diagnostic value of markers M2A, OCT3/4, AP-2gamma, PLAP and c-KIT in the detection of extragonadal seminomas." *Histopathology.* 2006 Sep;49(3):290-7.
3. **Cheng CJ**, et al. "Aberrant expression and distribution of the OCT-4 transcription factor in seminomas." *J Biomed Sci.* 2007 Nov;14(6):797-807. Epub 2007 Aug 8.
4. **Cools M**, et al. "Gonadoblastoma arising in undifferentiated gonadal tissue within dysgenetic gonads." *J Clin Endocrinol Metab.* 2006; 91:2404-13.
5. **Niwa H**, et al. "Quantitative expression of Oct-3/4 defines differentiation, dedifferentiation or self-renewal of ES cells." *Nat Genet.* 2000 Apr;24(4):372-6.
6. **Biermann K**, et al. "Diagnostic value of markers M2A, OCT3/4, AP-2gamma, PLAP and c-KIT in the detection of extragonadal seminomas." *Histopathology.* 2006 Sep;49(3):290-7.
7. **Cheng L**, et al. "OCT4: biological functions and clinical applications as a marker of germ cell neoplasia." *J Pathol.* 2007 Jan;211(1):1-9.
8. **Linn DE**, et al. "A Role for OCT4 in Tumor Initiation of Drug-Resistant Prostate Cancer Cells." *Genes Cancer.* 2010 Sep;1(9):908-16. doi: 10.1177/1947601910388271.

Technical Support

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