

Rev.: 2023-8-7

# OCT3/4 Catalog# BX50305 Recombinant Rabbit Monoclonal Antibody Catalog# BX50305 Product Datasheet Clone# BP6282 Predicted Molecular Wt: 39kDa Purity: ProA affinity purified IgG Species Cross-reactivity: Human Form: Liquid

# Background:

**Applications:** 

OCT-4, also known as OTF3 or POU5F1, is a member of the POU family of transcription factors, involved in the regulation of pluripotency during normal development and is detectable in embryonic stem and germ cells. It can specifically bind to the octamer motif (5'-ATTTCAT-3'), and it is critical for the self-renewal of embryonic stem cells. OCT-4 is a key regulator of self-renewal in embryonic stem cells; its expression is potentially correlated with tumorigenesis and can affect some aspects of tumor behavior such as tumor recurrence or resistance to therapies.

OCT-4 is a sensitive and specific marker for germ cell tumors. It is consistently detected in carcinoma in situ/gonadoblastoma, seminomas, germinoma, dysgerminoma, and embryonal carcinoma but not in the differentiated components of nonseminomas.

An antibody to OCT-4 is useful in the identification of primary as well as metastatic germ cell tumors.

### Subcellular location:

Nucleus

# **Recommended Method:**

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

IHC-P

## Immunogen:

Synthetic peptide. This information is proprietary to Biolynx.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### **Storage Conditions:**

-25°C to -18°C

### Shipment Instructions:

Shipped on blue ice. Upon delivery store at -25°C to - 18°C. Avoid freeze / thaw cycles.

# **Recommended Dilution:**

IHC-P: 1:100-1:200

### **Background References:**

1. Zhang S et al. Nucleic Acids Res 47:4449-4461 (2019).

2. Chang YC et al. Cell Death Dis 11:195 (2020).



Swissprot ID: Q01860

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human seminoma tissue labelling OCT3/4 with BP6282.

Product QC'd by:

For research use only. Not for use in diagnostic or therapeutic applications.