

## Oct-3/4 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX50186

Clone# BP6164

**Predicted Molecular Wt:** 38.5kDa

**Species Cross-reactivity:** Human

**Applications:** IHC-P

**Purity:** ProA affinity purified IgG

**Form:** Liquid

**Swissprot ID:** Q01860

### Background:

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'-ATTCAT-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:

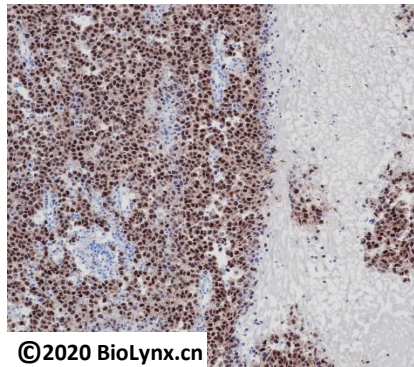
Nucleus

### 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.

### Immunogen:

Synthetic peptide corresponding to residues in Human Oct-3/4 was used as an immunogen.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human seminoma tissue labelling Oct-3/4 with BP6164. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0

### Storage Buffer:

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

### Storage conditions:

-20°C

### Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

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).

Product QC'd by: 

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