

For Research Use Only

# HRP-conjugated OCT4 Monoclonal antibody



Catalog Number: HRP-60242

## Basic Information

**Catalog Number:**

HRP-60242

**Size:**

100UL, Concentration: 1000 µg/ml by 5460

Bradford method using BSA as the standard;

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG1794

**GenBank Accession Number:**

BC020712

**GeneID (NCBI):**

5460

**Full Name:**

POU class 5 homeobox 1

**Calculated MW:**

39 kDa

**Observed MW:**

50-52 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

1C4B6

**Recommended Dilutions:**

WB 1:5000-1:50000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

human

**Positive Controls:**

WB: HEK-293 cells,

## Background Information

Expression of the OCT4 transcription factor is associated with an undifferentiated phenotype of human and mouse embryonic stem cells and germ cells. OCT4 (Octamer-4) is a homeodomain transcription factor of the POU family (POU5F1) involved in regulation of pluripotency during normal development and is detectable in embryonic stem (ES) and germ cells. Its expression is associated with an undifferentiated phenotype and tumors. In fact, gene knockdown of OCT4 promotes differentiation, thereby demonstrating a role for this factor in human ES cell self-renewal. As such, it is frequently used as a marker for undifferentiated ES cells or iPS (induced pluripotent stem) cells. OCT4 is one of the four key transcription factors (OCT4, SOX2, c-MYC, and KLF4) used to reprogram mouse and human fibroblasts to a pluripotent state as well as generate patient-specific iPS cells. The calculated molecular weight of OCT4 is 38 kDa, but the modified OCT4 protein is about 50 kDa.

## Storage

**Storage:**

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com  
W: ptglab.com

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