

For Research Use Only

# HRP-conjugated OCT4 Monoclonal antibody

Catalog Number:HRP-60242



## Basic Information

<b>Catalog Number:</b> HRP-60242	<b>GenBank Accession Number:</b> BC020712	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5460	<b>CloneNo.:</b> 1C4B6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q01860	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG1	<b>Full Name:</b> POU class 5 homeobox 1	
<b>Immunogen Catalog Number:</b> AG1794	<b>Calculated MW:</b> 39 kDa	
	<b>Observed MW:</b> 50-52 kDa	

## Applications

<b>Tested Applications:</b> WB	<b>Positive Controls:</b> WB : HEK-293 cells, HT-29 cells, mouse brain tissue
<b>Species Specificity:</b> human, mouse	

## 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.

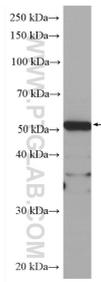
## Storage

**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**

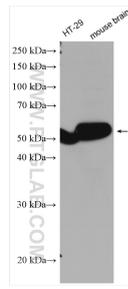
For technical support and original validation data for this product please contact:  
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## Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with HRP-60242 (OCT4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with HRP-60242 (OCT4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.