For Research Use Only

OCT4 Monoclonal antibody, PBS Only

Catalog Number:60242-1-PBS



Purification Method:

CloneNo.:

1C4B6

Protein A purification

Basic Information

Catalog Number: 60242-1-PBS

Size: 1mg/ml

Source:

GenBank Accession Number:

BC020712

GeneID (NCBI):

5460

UNIPROT ID:

Mouse Q01860 Isotype: Full Name:

lgG1 POU class 5 homeobox 1

Calculated MW: Immunogen Catalog Number:

AG1794 39 kDa

> Observed MW: 50-52 kDa

Applications

Tested Applications:

WB, IHC, Indirect ELISA

Species Specificity:

human, mouse, rat

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 selfrenewal. 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

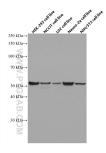
Storage:

Store at -80°C.

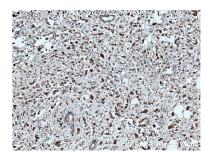
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

PBS Only

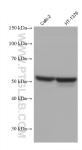
Selected Validation Data



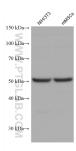
Various lysates were subjected to SDS PAGE followed by western blot with 60242-1-lg (OCT4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60242-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 60242-1-lg (OCT4 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60242-1-PBS in a different storage buffer formulation.



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