

# Rabbit anti OCT-4 Antibody

Alternate Names: POU5F1

#### **ANTIGEN PREPARATION**

A synthetic peptide corresponding to intra domain of OCT-4 protein from human, mouse and rat origins.

#### **BACKGROUND**

Oct-3/4, a 39 kDa protein as a member of POU transcription factors, was identified as a DNA-binding protein that activates gene transcription via a cis-element containing an Octamer motif ATGCAAAT. It is expressed in embryonic stem (ES) cells and germ cells, and its expression is required to sustain cell self-renewal and pluripotency. Oct-3/4 is the most recognized marker for totipotent ES cells.

#### **PURIFICATION**

The Rabbit IgG is purified by Epitope Affinity Purification.

#### **SPECIFICITY**

This antibody recognizes ~39 kDa of OCT-4 protein from human, rat and mouse origins. It does not cross react with OCT-1, OCT-2. The other species are not tested

### APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 μg/ml
ELISA	0.01-0.1 μg/ml
Immunoprecipitation	2-5 μg/ml
IHC	Not tested
Flow cytometry	Not tested

#### **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

**Order Information** 

601-450 See the label

N/A

100 ug/200 ul Rabbit

Hu, Ms, Rt

ELISA, WB, IHC

Description: Rabbit anti Oct-4

Catalogue#:

Application: Reactivity:

Lot#: Size:

Host:

Clone:

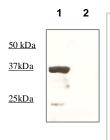
#### STORAGE

The antibodies are stable for 12 months from date of receipt when stored at  $-20^{\circ}$ C to  $-70^{\circ}$ C. The antibodies can be stored at  $2^{\circ}$ C- $8^{\circ}$ C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

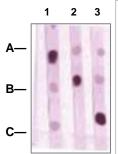
MOLECULAR WEIGHT:	39 kDa
POSITIVE CONTROL:	Mouse Kidney tissue lysate
CELLULAR LOCATION:	N/A

Optimal dilutions should be determined by researchers for the specific applications.

# **DATA ATTACHMENTS**



Western Blot: The tissue lysate derived from mouse kidney was immunoprobed by Rabbit anti-OCT-4 (Cat#601-450) at 1:500. An immunoreactive band is observed around ~34 kDa (1). This band is abolished by preincubation with immunizing peptide (2).



# Dot Blot: 1 μg peptides was blotted onto NC membrane A: OCT-1 B: OCT-2 C: OCT-4 Followed an immunoblotting at a 1:1000 dilution by:

- 1: Rabbit anti-OCT-1(Cat#601-440)
- 2: Rabbit anti-OCT-2(Cat#500-4304)
- 3: Rabbit anti-OCT-4 (601-450)

# **REFERENCES:**

Zhang ZH, et al. Post-translational modification of POU domain transcription factor Oct-4 by SUMO-1. The FASEB Journal. 2007;21:3042-3051.

# FOR RESEARCH USE ONLY.

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