

For Research Use Only

# OCT1 Polyclonal antibody

Catalog Number:10387-1-AP

Featured Product

14 Publications



## Basic Information

**Catalog Number:**  
10387-1-AP

**Size:**  
150ul , Concentration: 700 ug/ml by Nanodrop and 333 ug/ml by Bradford method using BSA as the standard;

**Source:**  
Rabbit

**Isotype:**  
IgG

**Immunogen Catalog Number:**  
AG0586

**GenBank Accession Number:**  
BC003571

**GeneID (NCBI):**  
5451  
**UNIPROT ID:**  
P14859

**Full Name:**  
POU class 2 homeobox 1

**Calculated MW:**  
76 kDa

**Observed MW:**  
90 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:2000-1:12000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:1000-1:4000

IF/ICC 1:500-1:2000

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, ELISA

**Cited Applications:**

WB, IHC, IF, ChIP

**Species Specificity:**

human

**Cited Species:**

human, mouse, rat, pig

**Positive Controls:**

**WB :** HEK-293 cells, NCCIT cells, HeLa cells, HepG2 cells

**IP :** HeLa cells,

**IHC :** human colon cancer tissue, human lymphoma tissue

**IF/ICC :** HeLa cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

The POU class 2 homeobox 1 (POU2F1), also known as octamer-binding transcription factor-1 (OCT-1), is a ubiquitous nuclear protein that regulates the transcription of target genes by binding to a cis-acting octamer element(5'-ATTGCAT-3'). It participated in the regulation of housekeeping genes, including histone H2B and snRNAs, for cell differentiation and proliferation [PMID:3462701]. In addition, it functions as a cellular stress sensor that modulates activities of tissue-specific target genes involved in immune and inflammatory responses [PMID:16322220]. It also acts as a repressor for the cytokine-inducible, NF- $\kappa$ B-dependent expression of E-selectin and the vascular cell adhesion molecule during vascular inflammation. Otherwise, it can interact with nuclear hormone receptors, such as the retinoid X receptor, the thyroid hormone receptor and the glucocorticoid receptor, and influence their transcription activity[PMID:17192276].

## Notable Publications

Author	Pubmed ID	Journal	Application
Erina Minato	31758567	Microbiol Immunol	WB
Elisa Närvä	35677646	iScience	WB
Ni Zeng	29604329	Mol Cell Endocrinol	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

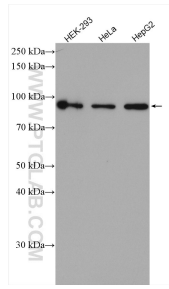
For technical support and original validation data for this product please contact:

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

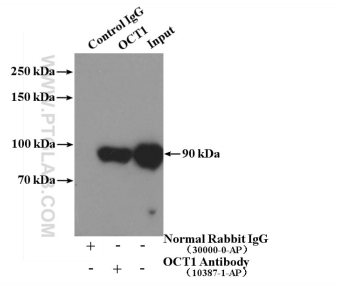
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

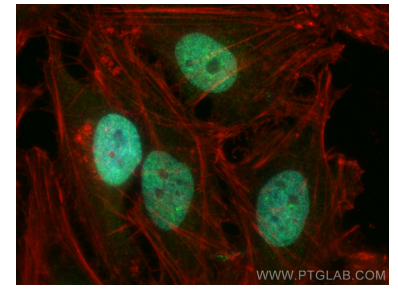
## Selected Validation Data



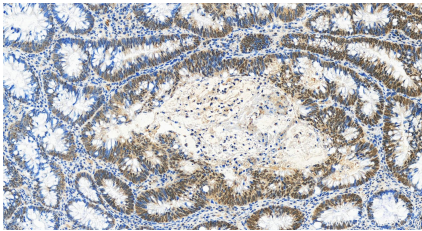
Various lysates were subjected to SDS PAGE followed by western blot with 10387-1-AP (OCT1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



IP result of anti-OCT1 (IP:10387-1-AP, 4ug; Detection:10387-1-AP 1:300) with HeLa cells lysate 1600ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using OCT1 antibody (10387-1-AP) at dilution of 1:1000 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10387-1-AP (OCT1 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).