## For Research Use Only

# OCT1 Polyclonal antibody

Catalog Number: 10387-1-AP

**Featured Product** 

13 Publications

GenBank Accession Number:



**Basic Information** 

Catalog Number:

10387-1-AP BC003571 GeneID (NCBI): Size: 700 μg/ml 5451

**UNIPROT ID:** Source: Rabbit P14859 Full Name: Isotype:

POU class 2 homeobox 1

Calculated MW: Immunogen Catalog Number:

AG0586 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 1:50-1:500 IF 1:10-1:100

**Applications** 

**Tested Applications:** 

IF/ICC, IHC, IP, WB, ELISA

Cited Applications: WB, IF, ChIP

Species Specificity: human

**Cited Species:** 

human, rat, mouse, pig

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

buffer pH 6.0

Positive Controls:

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

cells

tissue

IP: HeLa cells,

IHC: human colon cancer tissue, human lymphoma

IF: HeLa cells,

# **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'-ATTTGCAT-3'). It participated in the regulation of housekeeping genes, including histone H2B and  $sn RNAs, for cell \ differentiation \ and \ proliferation \ [PMID: 3462701]. \ In \ addition, it functions \ as \ a \ cellular \ stress \ sensor$ 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-kB-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

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

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

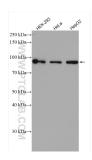
Aliquoting is unnecessary for -20°C storage

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

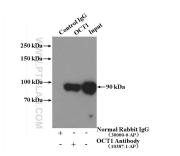
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

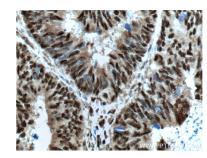
## **Selected Validation Data**



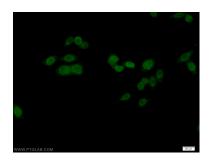
Various lysates were subjected to SDS PAGE followed by western blot with 10387-1-AP (OCT1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10387-1-AP (OCT1 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HeLa cells using 10387-1-AP (OCT1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).