

For Research Use Only

OCT1 Polyclonal antibody

Catalog Number: 10387-1-AP

Featured Product

13 Publications



Basic Information

Catalog Number:

10387-1-AP

Size:

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

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0586

GenBank Accession Number:

BC003571

GeneID (NCBI):

5451

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 µg for IP and 1:200-1:1000 for WB

IHC 1:50-1:500

IF 1:10-1:100

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

ChIP, IF, WB

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

IP: HeLa cells,

IHC: human colon cancer tissue, human lymphoma tissue

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 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-κB-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

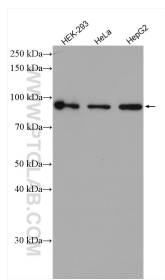
For technical support and original validation data for this product please contact:

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

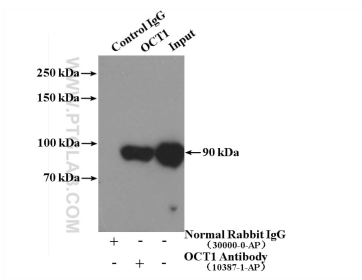
E: proteintech@ptglab.com
W: ptglab.com

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

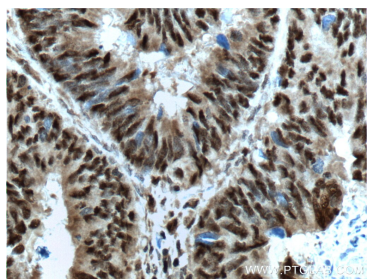
Selected Validation Data



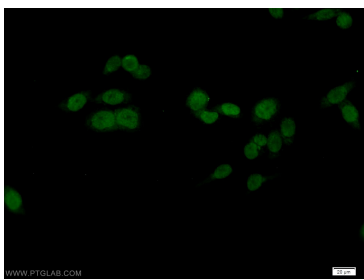
Various lysates were subjected to SDS PAGE followed by western blot with 10387-1-AP (OCT1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffin-embedded 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).