For Research Use Only

OTX2 Polyclonal antibody

Catalog Number:13497-1-AP Featured Product 30 Publications

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Basic Information

Catalog Number:
13497-1-AP

Size:
150ul , Concentration: 700 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4323

GenBank Accession Number:
BC032579

GeneID (NCBI):
5015

UNIPROT ID:
P32243

Full Name:
orthodenticle homeobox 2

Calculated MW:
297 aa, 32 kDa

Observed MW:
31-35 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:16000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200

Applications

Tested Applications:
WB, IHC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IP, CoIP, ChIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, chicken

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 : Y79 cells, mouse retina tissue, rat retina tissue

IP : Y79 cells,

IHC : human gliomas tissue,

Background Information

The orthodenticle homeobox 2, encoded by OTX2 gene, is a key transcription factor in developmental processes. In particular, it is required for the early specification of the brain and the embryonic development of sensory organs, including the, pineal gland, pituitary gland, inner part of the ear, eyes, and optic nerve. In later stages, it is important for maintaining intact retina and brain function. In addition, it acts as a transcriptional repressor and a gatekeeper of myogenic and neuronal differentiation in medulloblastoma cells. OTX2 binds to the MyoD1 core enhancer through its homeobox domain and the remarkable repressor activity exhibited by the homeobox domain renders OTX2 transcriptionally repressive

Notable Publications

Author	Pubmed ID	Journal	Application
Kyle S. Smith	36131015	Nature	WB
Meng Li	36273157	J Exp Clin Cancer Res	WB,ChIP
Yue Li	29031852	Neuropharmacology	IHC

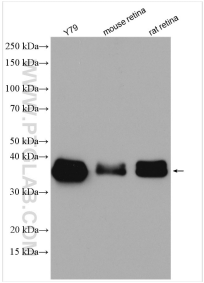
Storage

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

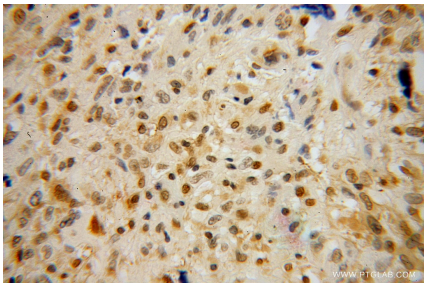
***** 20ul sizes contain 0.1% BSA**

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

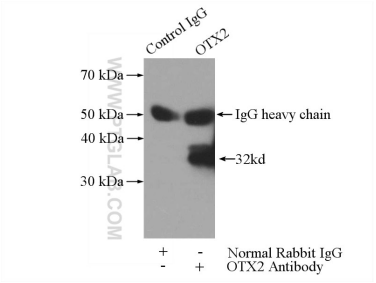
Selected Validation Data



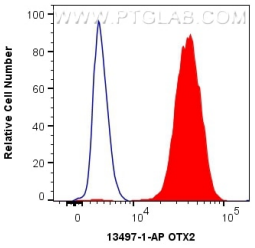
Various lysates were subjected to SDS PAGE followed by western blot with 13497-1-AP (OTX2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human gliomas using 13497-1-AP (OTX2 antibody) at dilution of 1:100 (under 40x lens).



IP result of anti-OTX2 (IP:13497-1-AP, 3ug; Detection:13497-1-AP 1:1500) with Y79 cells lysate 2400ug.



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human OTX2 (13497-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).