For Research Use Only

OTX2
Polyclonal ANTIBODY

Catalog Number:13497-1-AP Featured Product 8 Publications

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
13497-1-AP

Size:
92 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification

Immunogen Catalog Number:
AG4323

GenBank Accession Number:
BC032579

GeneID (NCBI):
5015

Full Name:
orthodenticle homeobox 2

Calculated MW:
297aa,32 kDa

Observed MW:
32 kDa

Recommended Dilutions:
WB 1:500-1:3000
IP 0.5-4.0 ug for IP and 1:500-1:3000 for WB
IHC 1:20-1:200
IF 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
ChIP, IF, IHC, WB

Species Specificity:
human,mouse,rat

Cited Species:
human, mouse

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;

IP : Y79 cells;

IHC : human gliomas tissue;

IF : mouse embryo 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

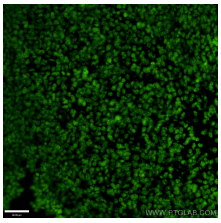
Author	Pubmed ID	Journal	Application
Yue Li	29031852	Neuropharmacology	IHC
Jing Luo	30928384	Cancer Lett	chIP
Pascal D Johann	26923874	Cancer Cell	chip

Storage

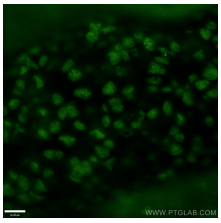
Storage:
Store at -20ºC. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20˚C storage

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



Immunofluorescent analysis of (4% PFA) fixed mouse embryo tissue using 13497-1-AP (OTX2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



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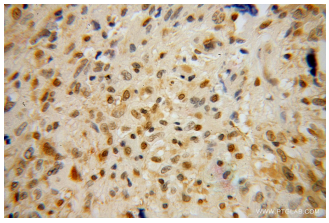
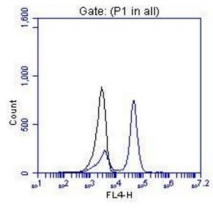
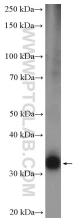


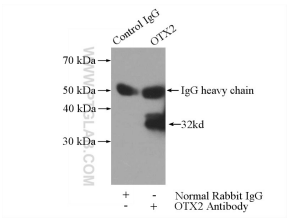
Immunohistochemical analysis of paraffin-embedded human gliomas using 13497-1-AP(OTX2 antibody) at dilution of 1:100 (under 40x lens)



FC result of anti-OTX2 (13497-1-AP, 1:100) with hESC which spontaneous differentiation toward retinal lineage (RPE). (Black: control; Blue OTX2).



Y79 cells were subjected to SDS PAGE followed by western blot with 13497-1-AP(OTX2 Antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours



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