

For Research Use Only

OTX2 Polyclonal antibody

Catalog Number: 13497-1-AP

Featured Product

26 Publications



Basic Information

Catalog Number: 13497-1-AP	GenBank Accession Number: BC032579	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 700 µg/ml by Nanodrop;	GeneID (NCBI): 5015	Recommended Dilutions: WB 1:2000-1:16000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200 IF 1:50-1:500
Source: Rabbit	Full Name: orthodenticle homeobox 2	
Isotype: IgG	Calculated MW: 297 aa, 32 kDa	
Immunogen Catalog Number: AG4323	Observed MW: 31-35 kDa	

Applications

Tested Applications: FC, IF, IHC, IP, WB, ELISA	Positive Controls: WB: Y79 cells, mouse retina tissue, rat retina tissue IP: Y79 cells, IHC: human gliomas tissue, IF: mouse embryo tissue,
Cited Applications: ChIP, CoIP, IF, IHC, WB	
Species Specificity: human, mouse, rat	
Cited Species: human, chicken, mouse	
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 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

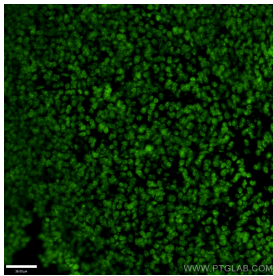
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

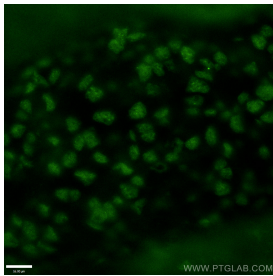
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

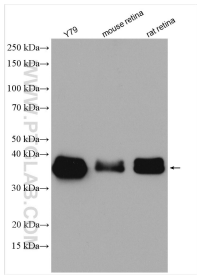
Selected Validation Data



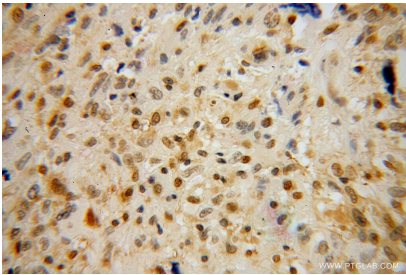
Immunofluorescent analysis of (4% PFA) fixed mouse embryo tissue using 13497-1-AP (OTX2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



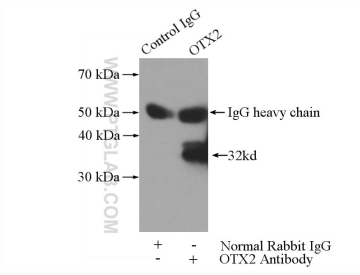
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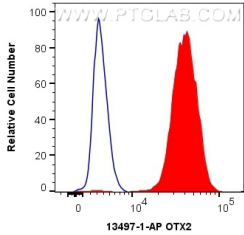
Various lysates were subjected to SDS PAGE followed by western blot with 13497-1-AP (OTX2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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.



1X10⁶ 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).