



OTX2 Monoclonal Antibody

Catalog No	YP-Ab-15736
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	OTX2
Immunogen	Purified recombinant fragment of human OTX2 expressed in E. Coli.
Specificity	OTX2 Monoclonal Antibody detects endogenous levels of OTX2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Homeobox protein OTX2;MCOPS5;OTX2;Orthodenticle homolog 2
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Nucleus .
Tissue Specificity	Eye,Retina,
Function	developmental stage:Embryo.,disease:Defects in OTX2 are the cause of microphthalmia syndromic type 5 (MCOPS5) [MIM:610125]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Up to 80% of cases of microphthalmia occur in association with syndromes that include non-ocular abnormalities. MCOPS5 patients manifest unilateral or bilateral microphthalmia/clinical anophthalmia and variable additional features including coloboma, microcornea, cataract, retinal dystrophy, hypoplasia or agenesis of the optic nerve, agenesis of the corpus callosum, developmental delay, joint laxity, hypotonia, and seizures.,function:Probably plays a role in the development of the brain and the sense organs. Can bind to the BCD target sequence (BTS): 5'-



TCTAATCCC-3', similarity: Belongs to the paired homeobox

Background

This gene encodes a member of the bicoid subfamily of homeodomain-containing transcription factors. The encoded protein acts as a transcription factor and plays a role in brain, craniofacial, and sensory organ development. The encoded protein also influences the proliferation and differentiation of dopaminergic neuronal progenitor cells during mitosis. Mutations in this gene cause syndromic microphthalmia 5 (MCOPS5) and combined pituitary hormone deficiency 6 (CPHD6). This gene is also suspected of having an oncogenic role in medulloblastoma. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Pseudogenes of this gene are known to exist on chromosomes two and nine. [provided by RefSeq, Jul 2012],

matters needing attention

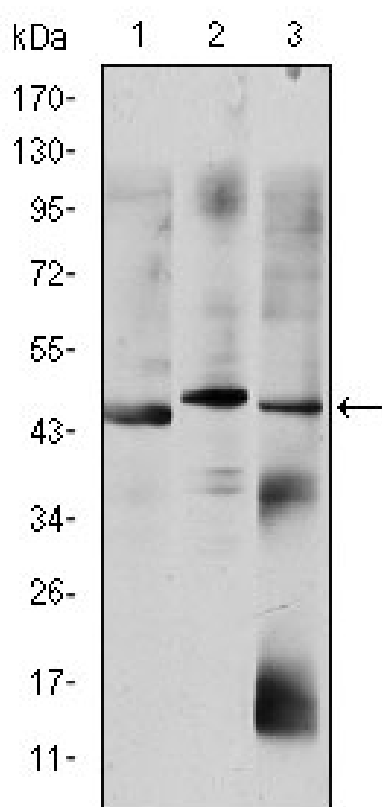
Avoid repeated freezing and thawing!

Usage suggestions

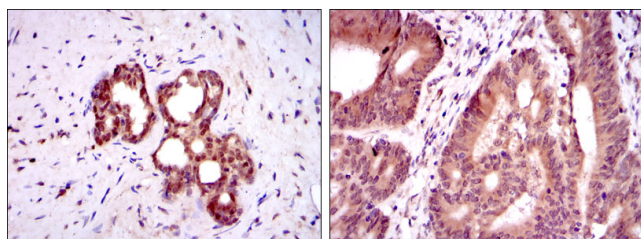
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



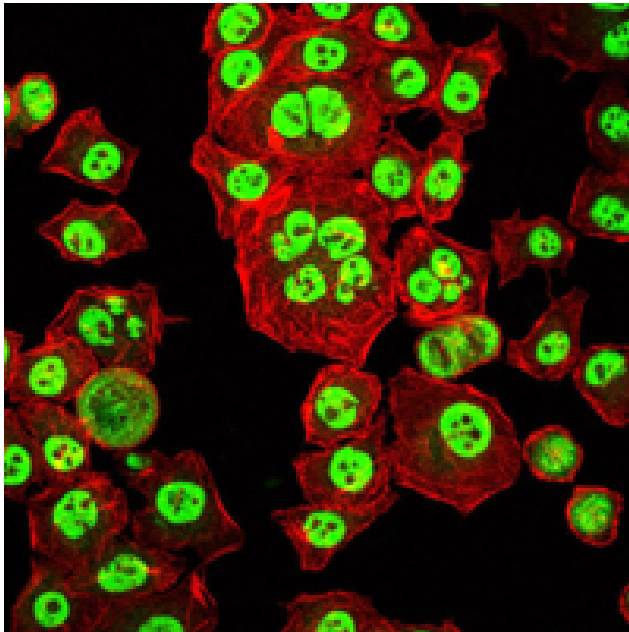
Products Images



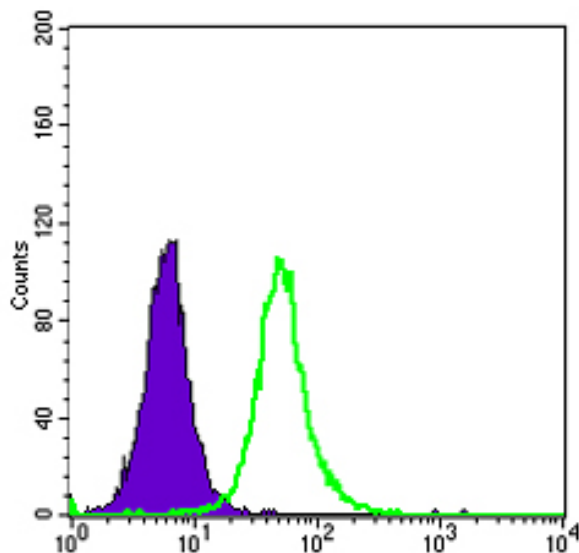
Western Blot analysis using OTX2 Monoclonal Antibody against HepG2 (1), Jurkat (2), and NTERA-2 (3) cell lysate.



Immunohistochemistry analysis of paraffin-embedded prostate tissues (left) and colon cancer tissues (right) with DAB staining using OTX2 Monoclonal Antibody.



Immunofluorescence analysis of HepG2 cells using OTX2 Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HepG2 cells using OTX2 Monoclonal Antibody (green) and negative control (purple).

