

Immunotag™ OTX2 Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM0490
Product Description	Immunotag™ OTX2 Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	OTX2
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,FCM,ELISA
Recommended 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
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of human OTX2 expressed in E. Coli.
Specificity	OTX2 Monoclonal Antibody detects endogenous levels of OTX2 protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	OTX2
Accession No.	P32243 P80206
Alternate Names	OTX2; Homeobox protein OTX2; Orthodenticle homolog 2

Antibody Specification

Description	orthodenticle homeobox 2(OTX2) Homo sapiens 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],
Protein Expression	Eye,Retina,
Subcellular Localization	nucleus,growth cone,protein complex,
Protein 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 family. Bicoid subfamily.,similarity:Contains 1 homeobox DNA-binding domain.,tissue specificity:Expressed in brain.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.