

Rabbit OTX2 Polyclonal Antibody | anti-OTX2 antibody

OTX2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327061	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

OTX2; Polyclonal Antibody; OTX2 Antibody; CPHD6; Homeobox protein OTX2; MCOPS 5; MCOPS5; MGC45000; Orthodenticle 2; Orthodenticle homeobox 2; Orthodenticle homolog 2 (Drosophila); Orthodenticle homolog 2; Orthodenticle2; Otx 2; otx2; OTX2_HUMAN; anti-OTX2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	OTX2 antibody detects endogenous levels of total OTX2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	289
Applicable Applications for anti-OTX2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human OTX2
Subcellular Location	Nucleus.
Tissue Specificity	At Carnegie stage (CS) 14, widely expressed throughout the telencephalon and mesencephalon, with a sharp cutoff at the midbrain-hindbrain boundary. At CS16, found in the lamina terminalis and the floor of the telencephalon. At CS16-CS19, in the developing eye, strongly expressed in the retinal pigment epithelium layer and more weakly in the neural retina, not expressed in the optic nerve itself (at protein level). Retinal expression peaks between CS19 and CS21 and decline in older fetuses. At CS22, detected in the choroid plexus, the dorsal thalamus, and the roof of the mesencephalon. In the developing nasal structures, expressed in the olfactory epithelium of the nasal pits at CS18.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (83%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (92%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA327061 at 1/100 staining Human breast cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of A673, using OTX2 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-OTX2 antibody	Description: 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. Function: Transcription factor probably involved in the development of the brain and the sense organs. Can bind to the bicoid/BCD target sequence (BTS): 5'-TCTAC-3'. Similarity: Belongs to the paired homeobox family. Bicoid subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	395455071
NCBI GeneID	5015
NCBI Accession #	NP_001257452.1
NCBI GenBank Nucleotide #	NM_001270523.1
UniProt Accession #	P32243; Q6GTV3; Q9HAW3; Q9P2R1; B2RAN5
Molecular Weight	Observed: 31 kDa Predicted: 32 kDa
NCBI Official Full Name	homeobox protein OTX2 isoform b
NCBI Official Synonym Full Names	orthodenticle homeobox 2
NCBI Official Symbol	OTX2
NCBI Official Synonym Symbols	CPHD6; MCOPS5
NCBI Protein Information	homeobox protein OTX2
UniProt Protein Name	Homeobox protein OTX2
UniProt Gene Name	OTX2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.