SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-CORD2/OTX3 antibody

Catalog Number: SL13990R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CORD2/OTX3
Immunogen:	KLH conjugated synthetic peptide derived from human CORD2: 1-100/299
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Rat(predicted:Human,Mouse,Dog,Cow,Horse,Sheep,Cat)
Predicted MW.:	32kDa
Subcellular Location:	The nucleus
Background:	The protein encoded by this gene is a photoreceptor-specific transcription factor which plays a role in the differentiation of photoreceptor cells. This homeodomain protein is necessary for the maintenance of normal cone and rod function. Mutations in this gene are associated with photoreceptor degeneration, Leber congenital amaurosis type III and the autosomal dominant cone-rod dystrophy 2. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some variants has not been determined. [provided by RefSeq, Jul 2008] **Function:** Binds and transactivates the sequence 5'-TAATC[CA]-3' which is found upstream of several photoreceptor-specific genes, including the opsin genes. Acts synergistically with other transcription factors, e.g. NRL and RX, to regulate photoreceptor cell-specific gene transcription. Essential for the maintenance of mammalian photoreceptors.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Subcellular Location: Nucleus.
Tissue Specificity: Retina.
DISEASE: Defects in CRX are the cause of Leber congenital amaurosis type 7 (LCA7) [MIM:613829]. LCA designates a clinically and genetically heterogeneous group of childhood retinal degenerations, generally inherited in an autosomal recessive manner. Affected infants have little or no retinal photoreceptor function as tested by electroretinography. LCA represents the most common genetic cause of congenital visual impairment in infants and children.
Defects in CRX are the cause of cone-rod dystrophy type 2 (CORD2) [MIM:120970]; also known as cone-rod retinal dystrophy 2 (CRD2). CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.
Defects in CRX are a cause of retinitis pigmentosa (RP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.
Similarity: Belongs to the paired homeobox family.
Contains 1 homeobox DNA-binding domain.
Database links:
Entrez Gene: 1406 Human
Entrez Gene: 280756 Cow
Entrez Gene: 12951 Mouse
Entrez Gene: 60446 Rat
Omim: 602225 Human
SwissProt: Q9XSK0 Cow
SwissProt: Q8SQ03 Dog
SwissProt: O43186 Human
SwissProt: O54751 Mouse
Unigene: 617342 Human
Unigene: 633434 Human
Unigene: 639114 Human
Unigene: 441911 Mouse
Unigene: 44287 Rat

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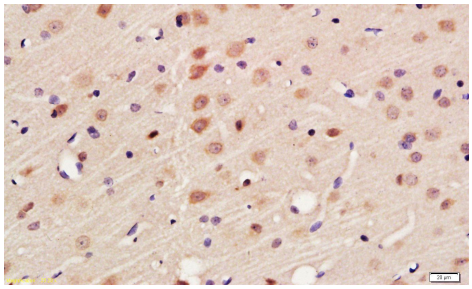
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[VALIDATION IMAGES]



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-CORD2/OTX3 Polyclonal Antibody, Unconjugated(SL13990R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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