10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EMX2 Antibody

Catalog # ASC11416

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q04743
Other Accession	Q04743, 19862512
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28303
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	EMX2 antibody can be used for detection of EMX2 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	2018
Other Names	Homeobox protein EMX2, Empty spiracles homolog 2, Empty spiracles-like protein 2, EMX2
Target/Specificity	EMX2; At least two isoforms of EMX2 are known to exist; this antibody will detect both isoforms. EMX2 antibody is predicted to not cross-react with EMX1
Reconstitution & Storage	EMX2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	EMX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EMX2
Function	Transcription factor, which in cooperation with EMX1, acts to generate the boundary between the roof and archipallium in the developing brain. May function in combination with OTX1/2 to specify cell fates in the developing central nervous system. In the inner ear, it controls the distribution of GPR156 at hair cell boundaries, and regulates the organization of stereociliary bundles in opposite orientations across the line of polarity reversal (LPR).

Cellular Location	Nucleus {ECO:0000250|UniProtKB:Q04744}. Cell projection, axon {ECO:0000250|UniProtKB:Q04744}. Note=Detected in axons within the olfactory mucosa and glomeruli in the olfactory bulb {ECO:0000250|UniProtKB:Q04744}
Tissue Location	Cerebral cortex.

Background

EMX2 Antibody: EMX2, like its closely related homolog EMX1, is a homeobox transcription factor involved in specifying cell fates in the developing central nervous system and participates in the development of olfactory neurons. EMX2 is expressed in the dorsal telencephalon during development in a low rostral-lateral to high caudal-medial gradient and is proposed to pattern the neocortex into defined functional areas. It is also expressed in embryonic and adult olfactory neuroepithelia where it complexes with eukaryotic translation initiation factor 4E (eIF4E) and possibly regulates mRNA transport or translation. In the developing urogenital system, it is expressed in epithelial tissues and is negatively regulated by HOXA10.

References

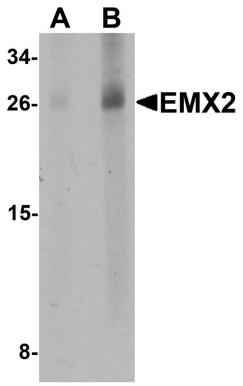
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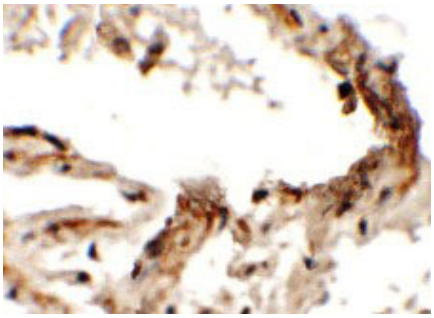
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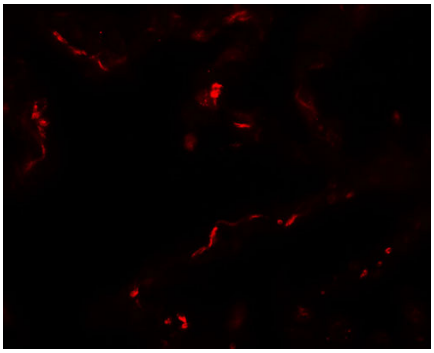
Images



Western blot analysis of EMX2 in human lung tissue lysate with EMX2 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of EMX2 in human lung tissue with EMX2 antibody at 2.5 µg/mL.



Immunofluorescence of EMX2 in human lung tissue with EMX2 antibody at 20 µg/mL.

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