

EMX2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5542C**Specification**

EMX2 Antibody (Center) - Product Information

Application	FC, WB,E
Primary Accession	Q04743
Other Accession	Q04744 , Q17R00 , NP_004089.1
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	28303
Antigen Region	111-138

EMX2 Antibody (Center) - Additional Information**Gene ID** 2018**Other Names**

Homeobox protein EMX2, Empty spiracles homolog 2, Empty spiracles-like protein 2, EMX2

Target/Specificity

This EMX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-138 amino acids from the Central region of human EMX2.

Dilution

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EMX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EMX2 Antibody (Center) - 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

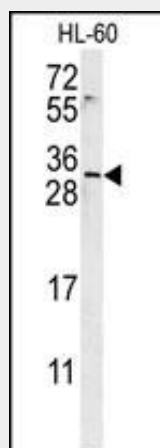
Cerebral cortex.

EMX2 Antibody (Center) - Protocols

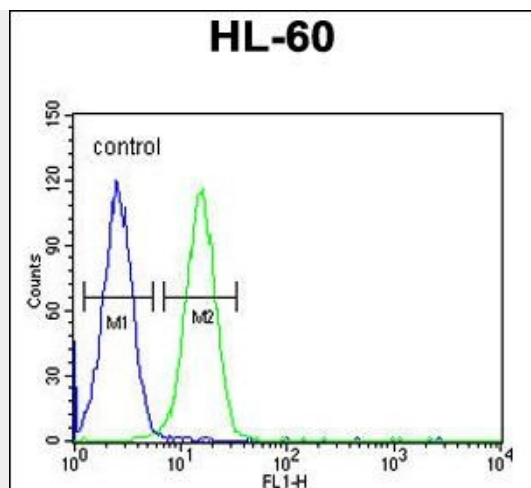
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EMX2 Antibody (Center) - Images



EMX2 Antibody (Center) (Cat. #AP5542c) western blot analysis in HL-60 cell line lysates (15ug/lane). This demonstrates the EMX2 antibody detected the EMX2 protein (arrow).



EMX2 Antibody (Center) (Cat. #AP5542c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EMX2 Antibody (Center) - Background

This gene encodes a homeobox-containing transcription factor that is the homolog to the 'empty spiracles' gene in *Drosophila*. Research on this gene in humans has focused on its expression in three tissues: dorsal telencephalon, olfactory neuroepithelium, and urogenital system. It 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. Alternative splicing results in multiple transcript variants encoding distinct proteins.

EMX2 Antibody (Center) - References

Inkster, B., et al. *Neuroimage* (2010) In press :
Bayatti, N., et al. *Eur. J. Neurosci.* 28(8):1449-1456(2008)
Merello, E., et al. *Am. J. Med. Genet. A* 146A (9), 1142-1150 (2008) :
Treloar, S.A., et al. *Mol. Hum. Reprod.* 13(8):587-594(2007)