

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

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**EMX2 Antibody (Center) - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">Q04743</a>
Other Accession	<a href="#">Q04744</a> , <a href="#">Q17R00</a> , <a href="#">NP_004089.1</a>
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**

WB~~1:1000

FC~~1:10~50

**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.

**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**

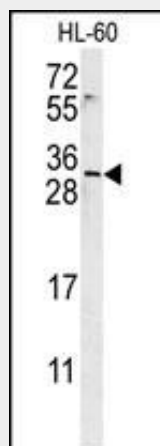
Cerebral cortex.

**EMX2 Antibody (Center) - Protocols**

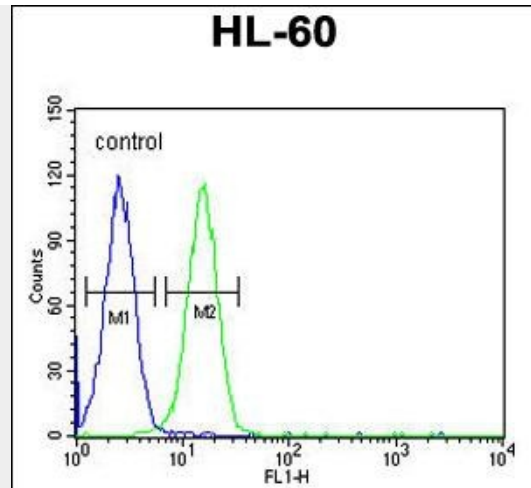
Provided below are standard protocols that you may find useful for product applications.

- [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)