SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-EMX2 antibody

SL11551R

Product Name:	EMX2
Chinese Name:	空通气孔样蛋白2抗体
Alias:	Empty spiracles homeobox 2; Empty spiracles homolog 2 (Drosophila); Empty spiracles homolog 2; Empty spiracles like protein 2; Empty spiracles-like protein 2; EMX 2; EMX2; EMX2_HUMAN; Homeobox protein EMX 2; Homeobox protein EMX2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	28kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human EMX2:151-250/252
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Emx1 and Emx2 are human homologs to the Drosophila developmental genes empty spiracles expressed in anterior body regions during early Drosophila embryogenesis. Emx1 and Emx2 are homeobox proteins expressed in the developing vertebrate brain. Emx2 is expressed in the dorsal telencephalon and small diencephalic regions, while Emx1 expression is exclusively confined to pyramidal neurons of the dorsal

telencephalon. In the embryonic brain, Emx1 is expressed in both proliferating and differentiating neurons while Emx2 is expressed only in proliferating neurons. OTX1 and OTX2 are human homologs of the Drosophila developmental genes orthodenticle. In development, the sequence of expression begins with OTX2 at day ten post coitum followed by OTX1, Emx2 and finally Emx1. The genes encoding human Emx1 and Emx2 map to chromosomes 2p13.2 and 10q26.11, respectively.

Function:
Transcription factor, which in cooperation with EMX2, acts to generate the boundary between the roof and archipallium in the developing brain. May function in combinations with OTX1/2 to specify cell fates in the developing central nervous system.

Subcellular Location:
Nucleus.

Tissue Specificity:
Cerebral cortex.

DISEASE:
Defects in EMX2 are the cause of schizencephaly (SCHZC) [MIM:269160]. Schizencephaly is an extremely rare human congenital disorder characterized by a full-thickness cleft within the cerebral hemispheres. These clefts are lined with gray matter and most commonly involve the parasylvian regions. Large portions of the cerebral hemispheres may be absent and replaced by cerebro-spinal fluid.

Similarity:
Belongs to the EMX homeobox family.
Contains 1 homeobox DNA-binding domain.

SWISS:
Q04743

Gene ID:
2018

Database links:

Entrez Gene: 523601Cow

Entrez Gene: 2018Human

Entrez Gene: 13797Mouse

Entrez Gene: 499380Rat

Omim: 600035Human

	SwissProt: Q17R00Cow SwissProt: Q04743Human SwissProt: Q04744Mouse Unigene: 202095Human Unigene: 245394Mouse Unigene: 16276Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.