

Rabbit Anti-OTX1 antibody

SL11596R

Product Name:	OTX1
Chinese Name:	转录 因子 OTX1抗体
Alias:	Homeobox protein OTX 1; Homeobox protein OTX1; MGC15736; Orthodenticle 1; Orthodenticle homeobox 1; Orthodenticle homolog 1; Orthodenticle1; Otx 1; otx1; OTX1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=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:	37kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human OTX1:1-100/354
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:	<u>PubMed</u>
Product Detail:	Transcription factors, OTX1 and OTX2, are two murine homologs of the Drosophila orthodenticle (OTD), show a limited amino acid sequence divergence. OTX1 and OTX2 play an important role during early and later events required for proper brain development in that they are involved in the processes of induction, specification and regionalization of the brain. OTX1 is involved in corticogenesis, sensory organ

development and pituitary functions, while OTX2 is necessary earlier in development, for the correct anterior neural plate specification and organization of the primitive streak. OTX2 is also required in the early specification of the neuroectoderm, which is destined to become the fore-midbrain, and both OTX1 and OTX2 co-operate in patterning the developing brain through a dosage-dependent mechanism. A molecular mechanism depending on a precise threshold of OTX proteins is necessary for the correct positioning of the isthmic region and for anterior brain patterning. The genes which encode OTX1 and OTX2 map to human chromosomes 2p15 and 14q21-q22, respectively.

Function:

Probably plays a role in the development of the brain and the sense organs. Can bind to the BCD target sequence (BTS): 5'-TCTAATCCC-3'.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in brain.

Similarity:

Belongs to the paired homeobox family. Bicoid subfamily. Contains 1 homeobox DNA-binding domain.

SWISS:

P32242

Gene ID:

5013

Database links:

Entrez Gene: 5013Human

Entrez Gene: 18423Mouse

Entrez Gene: 25646Rat

Omim: 600036Human

SwissProt: P32242Human

SwissProt: Q53TG6Human

SwissProt: P80205Mouse

SwissProt: Q5SS54Mouse

SwissProt: Q91ZJ3Mouse

SwissProt: Q63410Rat

Unigene: 445340Human

Unigene: 129663Mouse

Unigene: 33443Rat

Important Note:

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