



## Rabbit Anti-OTP antibody

SL11920R

<b>Product Name:</b>	OTP
<b>Chinese Name:</b>	螺旋转录因子OTP抗体
<b>Alias:</b>	MGC3161; orthopedia homeobox; orthopedia homolog; OTP_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,Fruit Fly,
<b>Applications:</b>	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.
<b>Molecular weight:</b>	34kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human OTP:121-220/325
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Homeodomain (HD) genes are helix-turn-helix transcription factors that play key roles in the specification of cell fates. OTP (orthopedia homeobox) is a 325 amino acid nuclear protein belonging to the paired homeobox family and Bicoid subfamily. OTP is expressed in neurons, which give rise to the paraventricular (PVN), supraoptic (SON), anterior periventricular (aPV) and arcuate (ARN) nuclei. Containing a homeobox DNA-binding domain and a OAR domain, OTP is suggested to be involved in the differentiation of hypothalamic neuroendocrine cells. At early embryonic stages in mice,

the expression of SIM2 is downregulated in the absence of OTP, indicating a potential role for OTP as an upstream regulator of SIM2. OTP is highly conserved in evolution and is encoded by a gene located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome.

**Function:**

OTP is a member of the homeodomain (HD) family. HD family proteins are helix-turn-helix transcription factors that play key roles in the specification of cell fates. This protein may function during brain development.

**Subcellular Location:**

Nuclear

**Similarity:**

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

**SWISS:**

Q5XKR4

**Gene ID:**

23440

**Database links:**

[Entrez Gene: 23440](#)Human

[Entrez Gene: 18420](#)Mouse

[Entrez Gene: 294640](#)Rat

[Omim: 604529](#)Human

[SwissProt: P56672](#)Drosophila melanogaster

[SwissProt: Q5XKR4](#)Human

[SwissProt: O09113](#)Mouse

[Unigene: 202247](#)Human

**Important Note:**

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