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

Rabbit Anti-OTP antibody

SL11920R

Product Name	OTP
Chinese Name	螺旋转录因子 OTP 抗体
Alias	MGC3161; orthopedia homeobox; orthopedia homolog; OTP_HUMAN.
Research Area	Developmental biology transcriptional regulatory factor Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,Fruit Fly)
Applications	ELISA=1:5000-10000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	34kDa
Cellular localization	The nucleus
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human OTP: 121-220/325
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	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