

# **Rabbit Anti-ODCp antibody**

## SL16872R

Product Name:	ODCp
Chinese Name:	精氨酸脱羧酶抗体
Alias:	L-Arginine decarboxylase; ADC; ADC_HUMAN; Antizyme inhibitor 2; ArgDC; Arginine decarboxylase; AZI2; KIAA1945; L-Arginine carboxy lyase; ODC antizyme inhibitor 2; ODC paralog; ODC-p; ODC-paralogue; ODC1L; ODCp; Ornithine decarboxylase like; Ornithine decarboxylase paralog; Ornithine decarboxylase-like protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, 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:	50kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ODCp:51-150/460
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:	ODCp is a 460 amino acid protein that is expressed in brain and testis. ODCp is a member of the Orn/Lys/Arg decarboxylase class-II family that catalyzes the creation of CO2 and agmatine from L-arginine. Mammalian ODCp differs from the forms expressed

in bacteria and plants and shares less than 50% homology with Ornithine decarboxylase (ODC). ODCp is associated with the mitochondrial membrane where excess agmatine can be degraded by the enzyme Agmatinase or bound by the imidazoline recepto. In the brain, the highest levels of ODCp are found in the hypothalamus. Mammalian ODCp is thermally unstable and can be inhibited by Ca2+, Co2+ and polyamines.

#### **Function:**

Decarboxylates L-arginine to agmatine. Truncated splice isoforms probably lack activity.

#### **Subunit:**

Interacts with OAZ1, OAZ2 and OAZ3; the interactions stabilize the complex by inhibiting AZIN2 ubiquitination and degradation. Does not form an heterodimer with ODC1 (By similarity). Monomer. Interaction with OAZ1, OAZ2 and OAZ3; the interactions lead to increased ornithine decarboxylase (ODC)activity and decreased rate of ODC1 degradation.

#### **Subcellular Location:**

Nucleus.

#### Tissue Specificity:

Highly expressed in brain. Also expressed in testis.

#### Similarity:

Belongs to the Orn/Lys/Arg decarboxylase class-II family.

#### **SWISS:**

O96A70

#### Gene ID:

113451

#### Database links:

Entrez Gene: 506961 Cow

Entrez Gene: 478144 Dog

Entrez Gene: 113451 Human

Entrez Gene: 242669 Mouse

Entrez Gene: 366473 Rat

Omim: 608353 Human

SwissProt: Q96A70 Human

SwissProt: Q8BVM4 Mouse

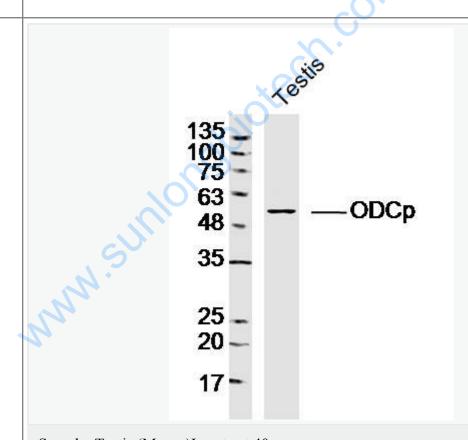
Unigene: 101807 Human

Unigene: 215814 Mouse

Unigene: 50921 Rat

### **Important Note:**

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



Picture:

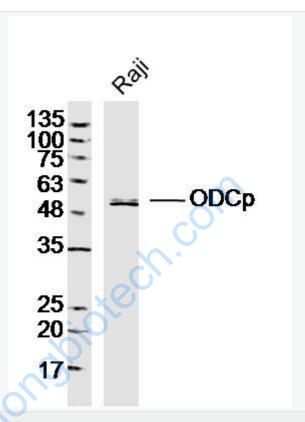
Sample: Testis (Mouse)Lysate at 40 ug

Primary: Anti-ODCp(SL16872R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 50kD

Observed band size: 50kD



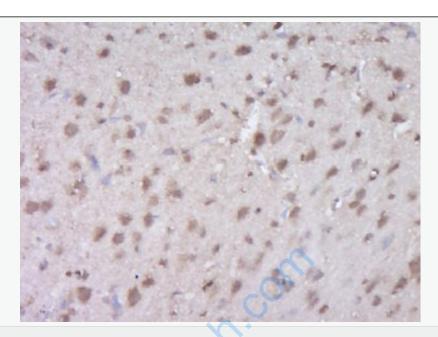
Sample: Raji (Human)Cell Lysate at 40 ug

Primary: Anti-ODCp(SL16872R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 50kD

Observed band size: 50kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ODCp) Polyclonal Antibody, Unconjugated (SL16872R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.