

# Rabbit Anti-ZIC3 antibody

## SL11608R

<b>Product Name:</b>	ZIC3
Chinese Name:	内脏异位相关蛋白/Zinc finger protein203抗体
Alias:	Heterotaxy 1; HTX; HTX1; ZIC 3; Zic family member 3 (odd paired Drosophila homolog heterotaxy 1); Zic family member 3; Zic3; ZIC3_HUMAN; Zinc finger protein 203; Zinc finger protein of the cerebellum 3; Zinc finger protein ZIC 3 (Zinc finger protein of the cerebellum 3); Zinc finger protein ZIC 3; ZNF203.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, 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:	51kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ZIC3 (331-410aa):331-410/467
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:	Zic3 is a C2H2 zinc finger transcription factor that establishes a proper left-right axis and midline neural patterning during early development of the vertebrate embryo. Mutations in this gene cause X-linked visceral heterotaxy, which includes congenital heart disease and left-right axis defects in organs. Zic3 mutations in the zinc finger DNA

binding domain and in the N-terminal domain result in loss of reporter gene transactivation, and mutations between amino acids 253-323 of the Zic3 protein causes aberrant cytoplasmic localization rather than the wild type nuclear localization.

#### **Function:**

Acts as transcriptional activator. Required in the earliest stages in both axial midline development and left-right (LR) asymmetry specification. Binds to the minimal GLI-consensus sequence 5'-GGGTGGTC-3'.

#### **Subcellular Location:**

Nucleus. Cytoplasm. Localizes in the cytoplasm in presence of MDFIC overexpression (By similarity). Translocation to the nucleus requires KPNA1 or KPNA6.

#### DISEASE:

Defects in ZIC3 are the cause of visceral heterotaxy X-linked type 1 (HTX1) [MIM:306955]. A form of visceral heterotaxy, a complex disorder due to disruption of the normal left-right asymmetry of the thoracoabdominal organs. It results in an abnormal arrangement of visceral organs, and a wide variety of congenital defects. Clinical features of visceral heterotaxy X-linked type 1 include dextrocardia, corrected transposition of great arteries, ventricular septal defect, patent ductus arteriosus, pulmonic stenosis, situs inversus viscerum, and asplenia and/or polysplenia. Defects in ZIC3 are a cause of VACTERL association X-linked with or without hydrocephalus (VACTERLX) [MIM:314390]. A syndrome characterized by vertebral anomalies, anal atresia, cardiac malformations, tracheoesophageal fistula, renal anomalies (urethral atresia with hydronephrosis), and limb anomalies (hexadactyly, humeral hypoplasia, radial aplasia, and proximally placed thumb). Some patients may have hydrocephalus. Some cases of VACTERL-H are associated with increased chromosome breakage and rearrangement.

#### Similarity:

Belongs to the GLI C2H2-type zinc-finger protein family. Contains 5 C2H2-type zinc fingers.

### **SWISS:**

O60481

#### Gene ID:

7547

#### Database links:

Entrez Gene: 7547Human

Entrez Gene: 22773 Mouse

Entrez Gene: 367944Rat

	Omim: 300265Human
	SwissProt: O60481Human
	SwissProt: Q62521Mouse
	Unigene: 111227Human
	Unigene: 255890 Mouse
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	135 = 63 - 25 - 20 - 17 - 17 - 17 - 18 - 18 - 18 - 18 - 18
	Sample:
	Cerebellum (Rat) Lysate at 40 ug
	Primary: Anti-ZIC3 ? (SL11608R) at 1/1000 dilution
	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
	Predicted band size: 51 kD

Observed band size: 49/50 kD



## Sample:

Cerebrum (Mouse) Lysate at 40 ug

Cerebellum (Mouse) Lysate at 40 ug

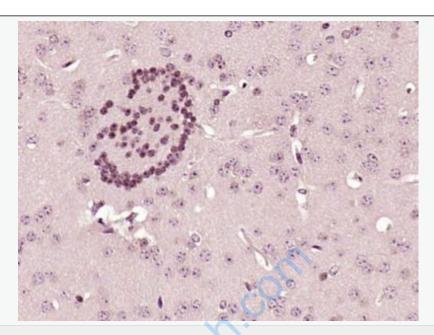
Embryo (Mouse) Lysate at 40 ug

Primary: Anti-ZIC3? (SL11608R) at 1/1000 dilution

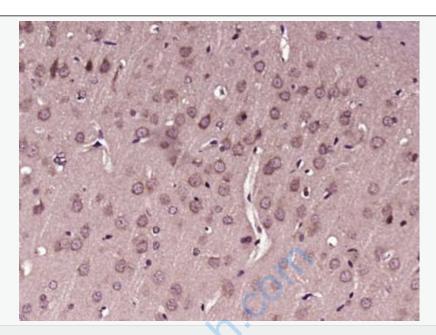
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 49/50 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse 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 (ZIC3) Polyclonal Antibody, Unconjugated (SL11608R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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 (ZIC3) Polyclonal Antibody, Unconjugated (SL11608R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.