10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ZIC3 Rabbit pAb

Catalog # AP96967

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	O60481
Other Accession	O60481
Reactivity	Rat, Mouse
Predicted	Pig, Human, Chicken, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50569
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ZIC3
Epitope Specificity	331-410/467
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the GLI C2H2-type zinc-finger protein family. Contains 5 C2H2-type zinc fingers.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	7547
Other Names	HTX; HTX1; VACTERLX; ZNF203; Bn; Ka; RGD1561261; ZIC3_HUMAN; ZIC3; Zinc finger protein 203; Zinc finger protein of the cerebellum 3; ZIC3_MOUSE; Zic family zinc finger 3; Zic family member 3; heterotaxy 1; Zic family member 3 (odd-paired homolog, Drosophila)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ZIC3
Synonyms	ZNF203
Function	Acts as a 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'.
Cellular Location	Nucleus. Cytoplasm. Note=Localizes in the cytoplasm in presence of MDFIC overexpression (By similarity) Translocation to the nucleus requires KPNA1 or KPNA6.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.