Product Specification Sheet

Zebra fish Cadherin 23 (Cdh23) Antibodies

□ Cat. # AB-23004-A	Rabbit Anti-Zebra fish CDH23 IgG (aff pure)	**SIZE**: 100 ug
□ Cat. # AB-23004-P	Zebra fish CDH23 Control/blocking peptide	**SIZE**: 100 ug

CDH23 found in the brain, is essential for normal cognitive development and female reproductive function. Mutations of this gene may lead to fragile X syndrome, mental retardation, premature ovarian failure, autism, Parkinson's disease, developmental delays and other cognitive deficits.

Protein Function Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells. CDH23 is required for establishing and/or maintaining the proper organization of the stereocilia bundle of hair cells in the cochlea and the vestibule during late embryonic/early postnatal development. It is part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates mechanotransduction in cochlear hair cells. Required for normal hearing

Protein name Cadherin 23
Gene name CDH23
Similarity Belongs to the ZIP transporter (TC 2.A.5) family.

Source of Antigen and Antibodies

Antigen	18aa, and 11-aa peptides of Zebra fish Cadherin 23 (Cdh23); (protein accession # Q6QQE1). (**designated AB-23004-P or control peptides**) conjugated to KLH as a mixture of 2 peptides; Epitope location C-terminal and internal.
Ab Host/type	Rabbit, polyclonal Aff pure IgG (**cat # AB-23004-A**) purified over the antigen column
2-ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
□ 100 ug/100ul □ solution □ lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
□ 100 ug/100 ul □ solution □ lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at 20°C and powder at 4°C or -20°C..
Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20°C or below.

Shipping: 4°C for solutions and room temp for powder

Recommended Usage

Western Blotting (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique).

ELISA (1:10K-1:100K; using 50-100 ng of control peptide/well).

Histochemistry & Immunofluorescence: not tested. We recommend the use of affinity pure antibody at 2-20 ug/ml.

Specificity & Cross-reactivity

Zebra fish AB-23004-P peptide sequences are found to be 78% conserved in mouse and human. Antibody reactivity has not been established between species. The AB-23004-P control peptides, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity.

General References: Hulpiau P, (2009) Int. J. Biochem. Cell Biol. 41 (2): 349–69. Bello S.M. (2012) J. Neuroscience 32(2):490-505. Sollner C., (2004). Nature 428:955-959.

**This product is for In vitro research use only.*

Related materials available from ADI

Antibodies:

ReadyBlot **Kidney Protein Explorer**-Study distribution of protein in various regions of the Zebra fish/rat kidney using the pre-made protein blots; Western blot recycling kit-Use the same blot for WNK1-4.

AB-23004-A-P 130821VP

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com