## PRODUCT INFORMATION

**Product name: ZIC2 antibody** 

**Product type: Primary antibodies** 

**Description: Rabbit polyclonal to ZIC2** 

Immunogen: 3 synthetic peptides (human) conjugated to KLH

Reacts with: Human, Mouse
Tested applications: ELISA, WB

## **GENE INFORMATION**

Gene Symbol: ZIC2

Gene Name: Zic family member 2 Ensembl ID: ENSG00000043355

Entrez GeneID: 7546

GenBank Accession number: AF104902

Omim ID: 603073 Swiss-Prot: 095409

Molecular weight of ZIC2: 55kDa

Function: Acts as a transcriptional activator or repressor. Plays important roles in the early stage of organogenesis of the CNS. Activates the transcription of the serotonin transporter SERT in uncrossed ipsilateral retinal ganglion cells (iRGCs) to refine eye-specific projections in primary visual targets. Its transcriptional activity is repressed by MDFIC. Involved in the formation of the ipsilateral retinal projection at the optic chiasm midline. Drives the expression of EPHB1 on ipsilaterally projecting growth cones. Binds to the minimal GLI-consensus sequence 5'-TGGGTGGTC-3'. Associates to the basal SERT promoter region from ventrotemporal retinal segments of retinal embryos

**Expecected subcellular localization: Nucleus. Cytoplasm.** 

Note: Localizes in the cytoplasm in presence of MDFIC overexpression. Both phosphorylated and unphosphorylated forms are localized in the nucleus

Summary: This gene encodes a member of the ZIC family of C2H2-type zinc finger proteins.

This protein functions as a transcriptional repressor and may regulate tissue specific expression of dopamine receptor D1. Mutations in this gene cause holoprosencephaly type 5. Holoprosencephaly is the most common structural anomaly of the human brain. A polyhistidine tract polymorphism in this gene may be associated with increased risk of neural tube defects. This gene is closely linked to a gene encoding zinc finger protein of the cerebellum 5, a related family member on chromosome 13. [provided by RefSeq, Jul 2008]

## **APPLICATION NOTE**

## **Recommended dilution:**

- ELISA: Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/10000 is determined. Appropriate specificity controls were run.
- WB: 1/5000.

Optimal dilutions/concentration should be determined by the end user.

Raised in: Rabbit

**Clonality: Polyclonal** 

Isotype: IgG

**Purity: Purified Antibody** 

Storage buffer: 0.5 X PBS, 50% glycerol containing a final concentration of 0.1% BSA and

 $0.01\%\ Thimerosal.$ 

Form: Liquid

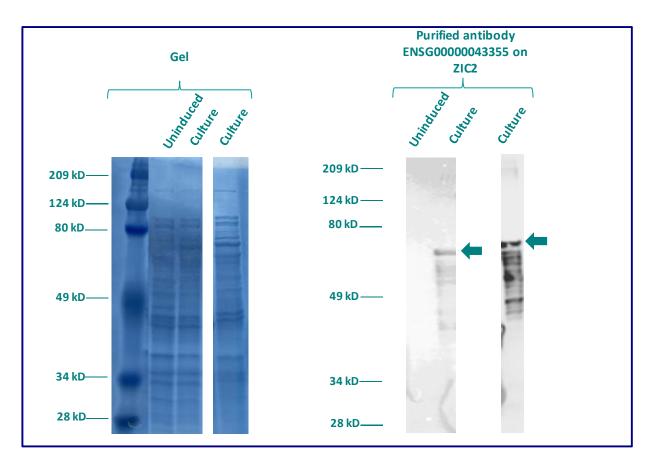
Storage instruction: Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

The purified antibody ENSG000000043355 has been tested at 1/10000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-thio has been tested at 1/5000 on induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name: pBAD-DEST49.

Molecular weight of ZIC2: 68.8kDa (54.8kDa + another 14kDa for the tag).



**Gel concentration: 10%** 

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000043355 at 1: 5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2<sup>nd</sup> Antibody: The antibody is diluted in blocking buffer.

• Dilute the anti-Rabbit IgG HRP conjugated at 1/10000

60 minutes of incubation