

# TSHZ2 Antibody

Catalog # ASC11451

### **Product Information**

Application	WB, IF, E
Primary Accession	<u>Q9NRE2</u>
Other Accession	<u>NP_775756, 153945734</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	115005
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TSHZ2 antibody can be used for detection of TSHZ2 by Western blot at 1 □g/mL. Antibody can also be used for immunofluorescence starting at 20 □g/mL. For immunofluorescence start at 5 □g/mL.

#### **Additional Information**

Gene ID Other Names	128553 Teashirt homolog 2, Ovarian cancer-related protein 10-2, OVC10-2, Zinc finger protein 218, TSHZ2, C20orf17, TSH2, ZNF218
Target/Specificity	TSHZ2;
Reconstitution & Storage	TSHZ2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TSHZ2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	TSHZ2
Synonyms	C20orf17, TSH2, ZNF218
Function	Probable transcriptional regulator involved in developmental processes. May act as a transcriptional repressor (Potential).
Cellular Location	Nucleus.
Tissue Location	Expressed in brain; strongly reduced in post-mortem elderly subjects with Alzheimer disease.

## Background

TSHZ2 Antibody: The Teashirt zinc finger homeobox (TSHZ) family comprise a family of evolutionarily conserved transcription factors that, in Drosophila, are active in specific body parts for patterning, but whose function in vertebrates is less clear. In mice, the known three TSHZ proteins are expressed in distinct patterns in the developing and adult brain, suggesting that they play a role in the establishment of regional identity and specification of cell types within the brain. Recent experiments have shown that the expression of TSHZ2 is frequently downregulated in most breast and prostate cancers and its promoter was unmethylated in virtually all cases, suggesting this family of proteins may also be involved in carcinogenesis.

#### References

Caubit X, Core N, Boned A, et al. Vertebrate orthologues of the Drosophila region-specific patterning gene teashirt. Mech. Dev. 2000; 91:445-8.

Santos JS, Fonseca NA, Vieira CP, et al. Phylogeny of the Teashirt-related zinc finger (tshz) gene family and analysis of the developmental expression of tshz2 and tshz3 in the zebrafish. Dev. Dyn. 2010; 239:1010-8. Caubit X, Tiveron MC, Cremer H, et al. Expression patterns of the three Teashirt-related genes define specific boundaries in the developing and postnatal mouse forebrain. J. Comp. Neurol. 2005; 486:76-88. Yamamoto M, Cid E, Bru S, et al. Rare and frequent promoter methylation, respectively, of TSHZ2 and 3 genes that are both downregulated in expression in breast and prostate cancers. PLoS ONE 2011; 6:e17149.

#### Images



Western blot analysis of TSHZ2 in A-20 cell lysate with TSHZ2 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of TSHZ2 in A20 cells with TSHZ2 antibody at 20  $\mu g/mL.$ 

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