# USH3A (A-13): sc-69072



The Power to Question

#### **BACKGROUND**

USHSA (Usher syndrome type 3), also known as CLRN1 (Clarin-1) or USH3, is a 232 amino acid multi-pass membrane protein that exists as multiple alternatively spliced isoforms and belongs to the clarin family. Expressed in a variety of tissues, including retina, USH3A is thought to be involved in the maintenance of the inner ear and retina, specifically playing a role in excitory ribbon synapse junctions between hair cells and cochlear ganglion cells, as well as in analogous synapses within the retina. Defects in the gene encoding USH3A are the cause of Usher syndrome type 3 (USH3), a genetically heterogeneous condition characterized by postlingual progressive deafness and onset of retinitis pigmentosa in the second decade of life.

# **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: CLRN1 (human) mapping to 3q25.1; Clrn1 (mouse) mapping to  $3\ D$ .

# SOURCE

USH3A (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USH3A of human origin.

#### **STORAGE**

Store at  $4^{\circ}$  C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69072 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

USH3A (A-13) is recommended for detection of USH3A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

USH3A (A-13) is also recommended for detection of USH3A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for USH3A siRNA (h): sc-63191, USH3A siRNA (m): sc-63192, USH3A shRNA Plasmid (h): sc-63191-SH, USH3A shRNA Plasmid (m): sc-63192-SH, USH3A shRNA (h) Lentiviral Particles: sc-63191-V and USH3A shRNA (m) Lentiviral Particles: sc-63192-V.

Molecular Weight of USH3A: 26 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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