SANTA CRUZ BIOTECHNOLOGY, INC.

Otoconin 90 (h): 293T Lysate: sc-175367

BACKGROUND

The ability to sense orientation relative to gravity requires dense particles, called otoconia, which are localized in the vestibular macular organs. In mammals, otoconia are composed of proteins (otoconins) and calcium carbonate crystals in a calcite lattice. Otoconin 90, also known as PLA2L (phospholipase A2 homolog) or OC90, is a 493 amino acid secreted protein belonging to the phospholipase A2 family. Consisting of 3 PA2-type domains, Otoconin 90 regulates the growth of otoconia crystals. The inertial mass of otoconia crystals provides a shearing force to stimulate the mechanoreceptors of the utricle and saccule (the gravity receptor organ) under the stimuli of linear motion. Otoconin 90 specifically recruits other matrix components, which are essential for formation of the organic matrix of otoconia. Otoconin 90 is encoded by a gene located on human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OC90 (human) mapping to 8q24.22.

PRODUCT

Otoconin 90 (h): 293T Lysate represents a lysate of human Otoconin 90 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Otoconin 90 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Otoconin 90 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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