

Auditory hair cells are the mechanical **sensors** of sound waves in the **inner ear**, and the **stereocilia**, which are **actin**-rich protrusions of different heights on the apical surfaces of hair cells, are responsible for the **transduction** of **sound waves** into electrical signals. As a crucial **actin**-binding and bundling protein, **espin** is able to cross-link actin filaments and is therefore necessary for **stereocilia** morphogenesis. Using advanced super-resolution stimulated emission depletion microscopy, we imaged espin expression at the sub-diffraction limit along the whole length of the stereocilia in outer hair cells and inner hair cells in order to better understand espin's function in the development of stereocilia ¹⁾.

¹⁾

Qi J, Zhang L, Tan F, Liu Y, Chu C, Zhu W, Wang Y, Qi Z, Chai R. Espin distribution as revealed by super-resolution microscopy of stereocilia. Am J Transl Res. 2020 Jan 15;12(1):130-141. PMID: 32051742; PMCID: PMC7013225.

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