

Highlight: Researchers uncover new data about Arl13b function in Joubert syndrome

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Researchers in Ireland have gained new understanding of the role played by the ciliary protein Arl13b in Joubert syndrome (JS), a rare disorder characterized by developmental delay, mental retardation, and low muscle tone, among other symptoms.

The findings will be published online March 15 in the [Journal of Cell Biology](#).

Although Arl13b—which is required for cilium biogenesis and embryo development—is known to be mutated in patients with JS, the specific ciliary and [molecular basis](#) of Arl13b function has been poorly understood. Oliver Blacque and colleagues (University College Dublin) used *C. elegans* and mammalian cell culture systems to investigate Arl13b function.

Their findings show that JS-associated Arl13b works at ciliary membranes, where it regulates ciliary transmembrane protein localization and transport of proteins to the tip of the cilium.

More information: Cevik, S., et al. 2010. *J. Cell Biol.*
[doi:10.1083/jcb.200908133](https://doi.org/10.1083/jcb.200908133)

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