Docket #: S94-013

In Vitro Assay for Wnt growth factor (L Wnt-3A)

Wnt genes provide important signals dugin development and tumorigenesis, but their mechanism of action is poorly understood. We have developed a novel cell culture assay for the Drosophila Wnt gene wingless, using a Drosophila imaginal disc cell line. Transfection of a temperature sensitive wingless cDNA lead to a temperature-dependent accumulation of the adherens junction protein armadillo, a known genetic target of wingless. Two other Drosophila Wnt genes do not affect amadillo. The increase in armadillo is due to protein stabilization and is also caused by extracellular matrix or soluble medium from wingless-producing cells. The activity in the medium has a rapid, dosage dependent effect and can be depleted by an antibody to wingless, providing the first quantiative and early response to an extracellular Wnt protein.

Innovators

- Roeland Nusse

Licensing Contact

Michael Bellas

Licensing Associate

Email