

# The Netrin-4/Laminin $\gamma$ 1/Neogenin-1 complex mediates migration in SK-N-SH neuroblastoma cells

Villanueva, Andrea A.

Puvogel, Sofía

Lois, Pablo

Muñoz-Palma, Ernesto

Ramírez Orellana, Manuel

Lubieniecki, Fabiana

Casco Claro, Fernando

Gallegos, Iván

García-Castro, Javier

Sanchez-Gomez, Pilar

Torres, Vicente A.

Palma, Verónica

© 2018, © 2018 Informa UK Limited, trading as Taylor & Francis Group. Neuroblastoma (NB) is the most common pediatric extracranial solid tumor. It arises during development of the sympathetic nervous system. Netrin-4 (NTN4), a laminin-related protein, has been proposed as a key factor to target NB metastasis, although there is controversy about its function. Here, we show that NTN4 is broadly expressed in tumor, stroma and blood vessels of NB patient samples. Furthermore, NTN4 was shown to act as a cell adhesion molecule required for the migration induced by Neogenin-1 (NEO1) in SK-N-SH neuroblastoma cells. Therefore, we propose that NTN4, by forming a ternary complex with Laminin  $\gamma$ 1 (LM $\gamma$ 1) and NEO1, acts as an essential extracellular matrix component, which induces the migration of SK-N-SH cells.