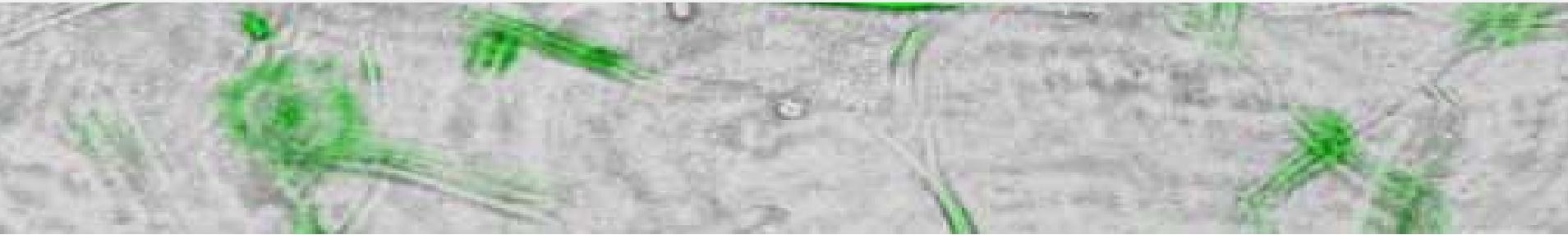


Dual role of sphingosine kinase-1 in promoting the differentiation of dermal fibroblasts and the dissemination of melanoma cells



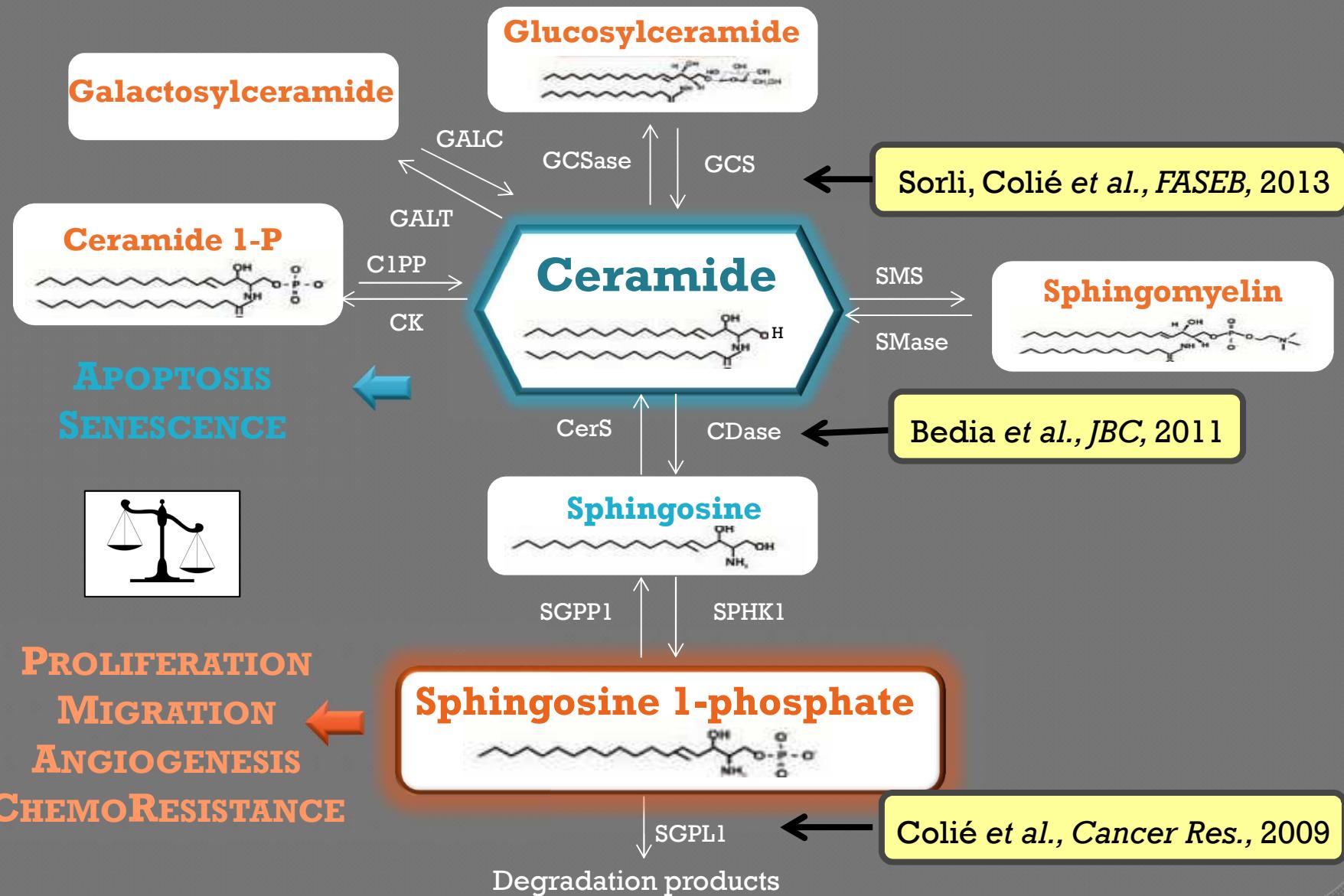
Marie-Lise Bats¹, Virginie Albinet¹, Andrea Huwiler², Philippe Rochaix,³ Christine Chevreau³, Bruno Ségui¹, Thierry Levade¹ and Nathalie Andrieu-Abadie¹

¹ Inserm UMR1037, Cancer Research Center of Toulouse – France

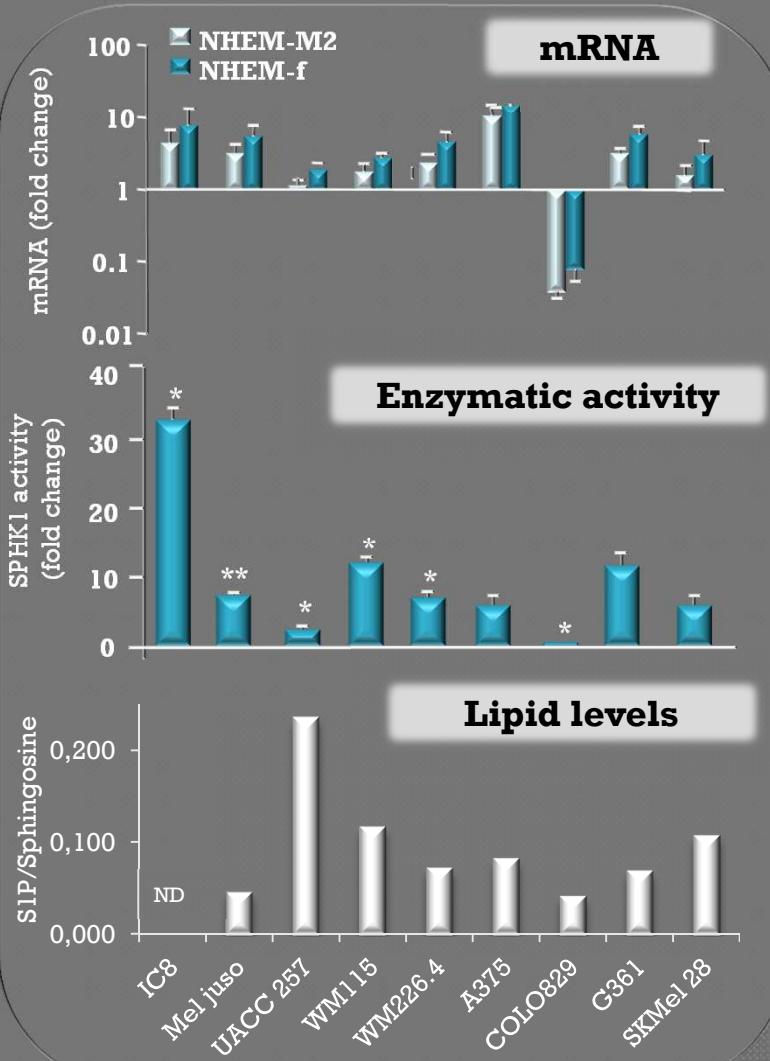
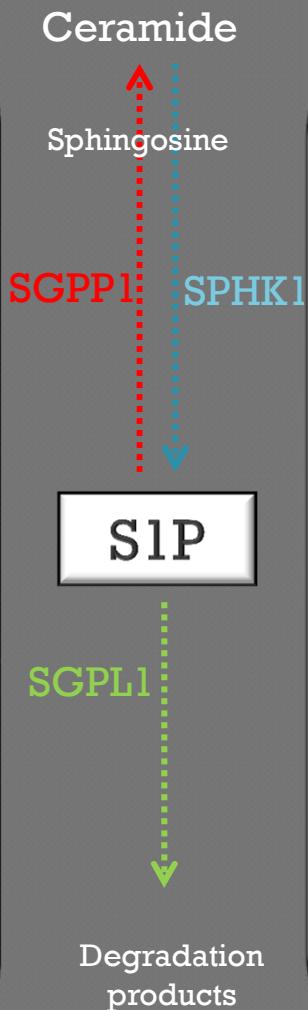
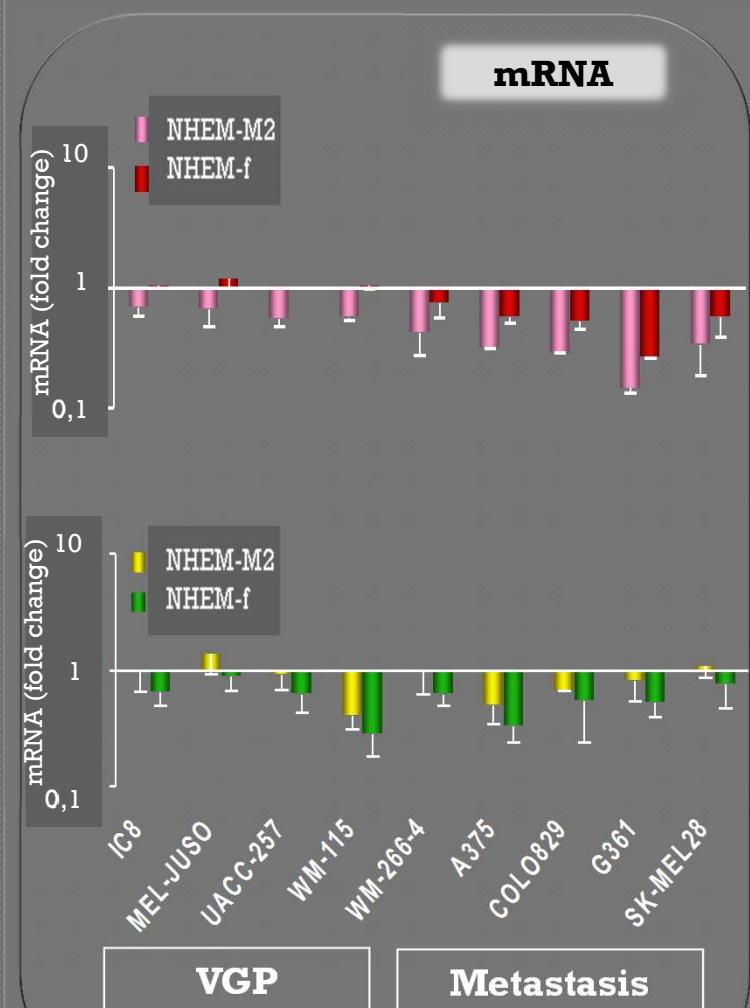
² Institute of Pharmacology, University of Bern - Switzerland

³ Unicancer group, ICR, Toulouse - France

Sphingolipid metabolism is altered in melanoma

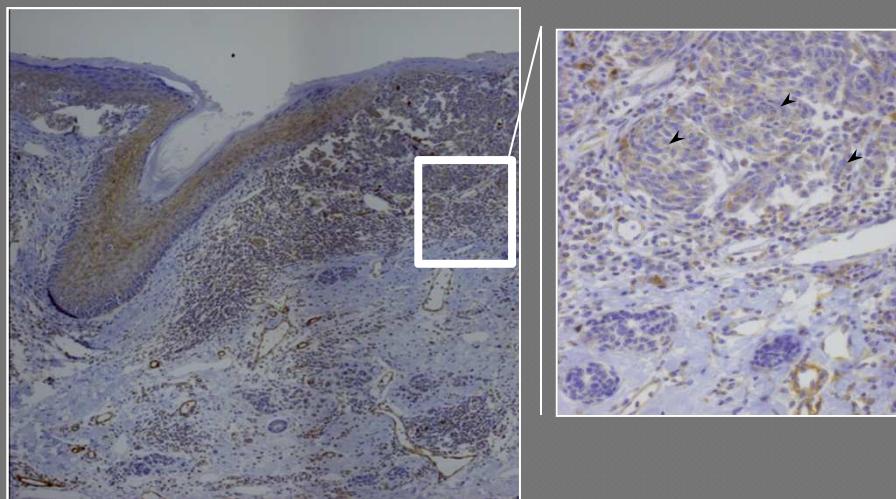
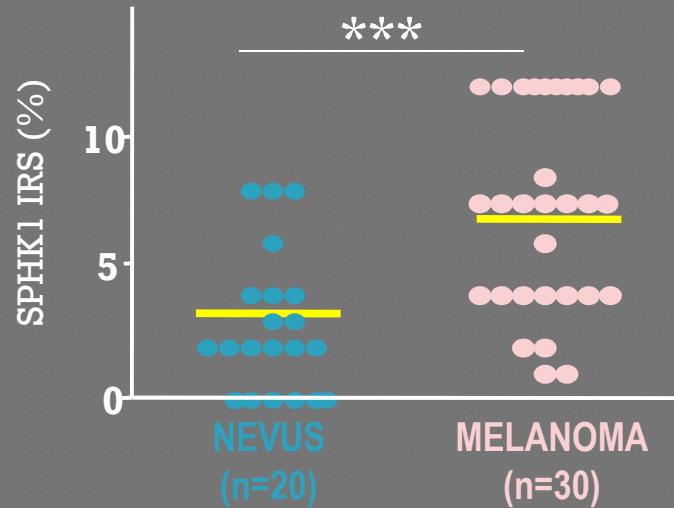


S1P metabolism is dysregulated in melanoma

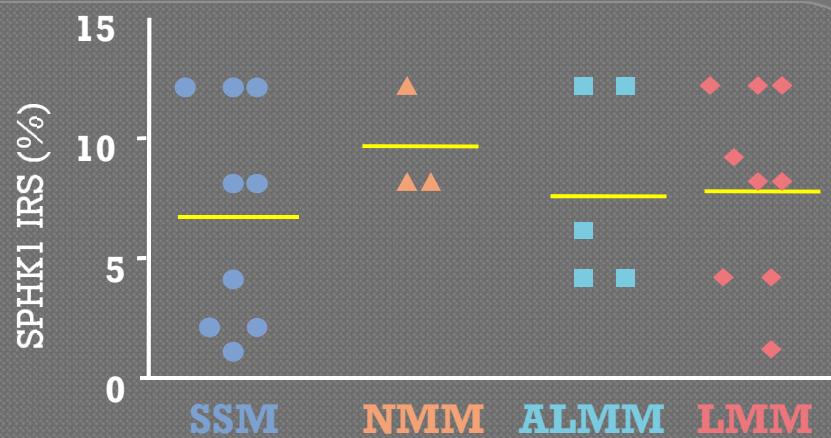


Colié et al. Cancer Res , 2009

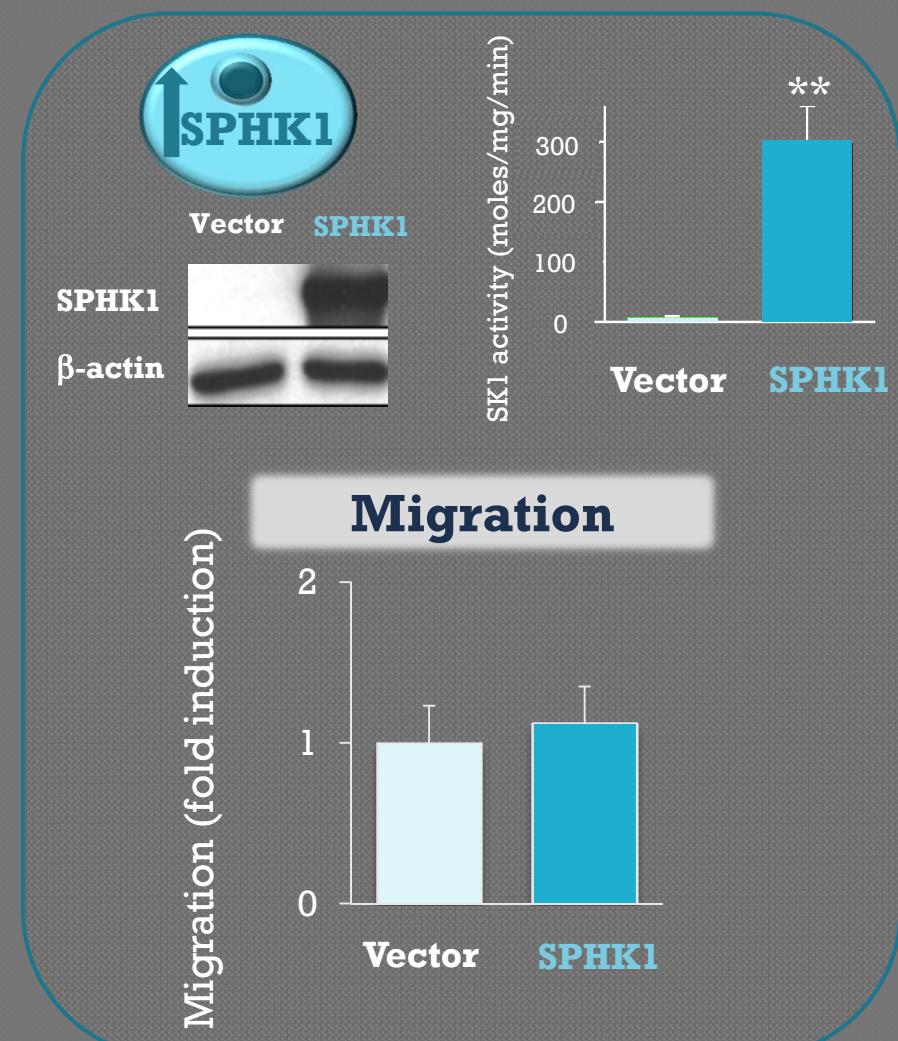
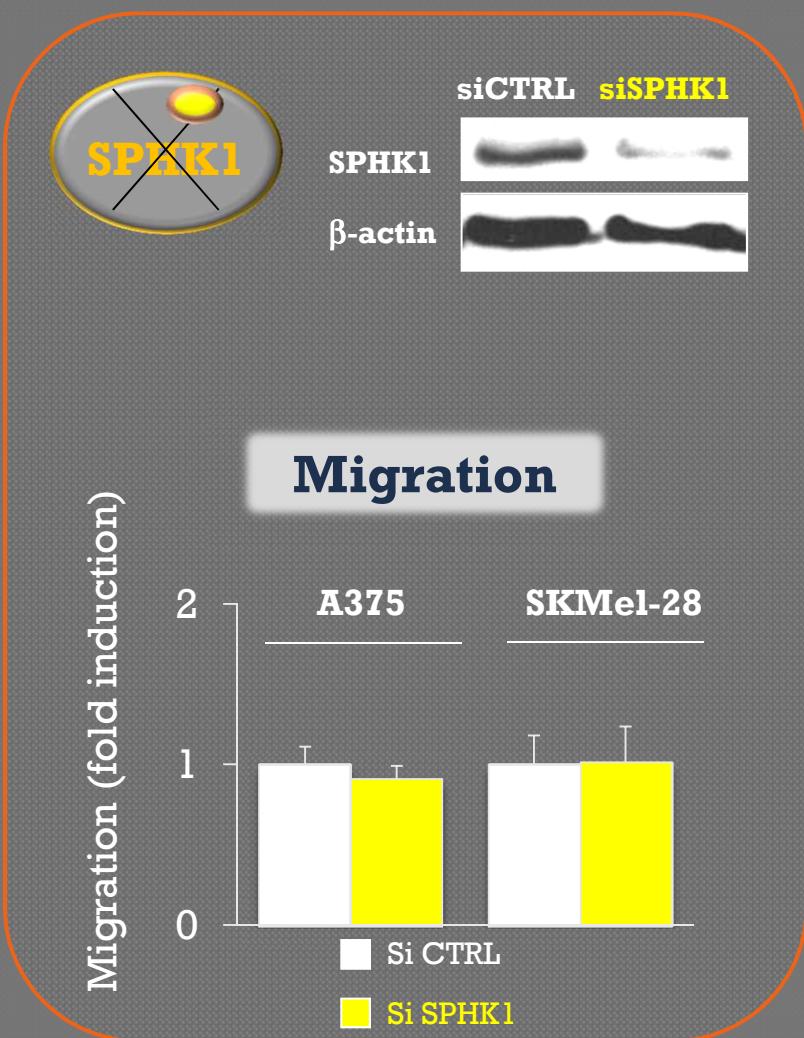
SPHK1 is overexpressed in human melanoma tumor biopsies



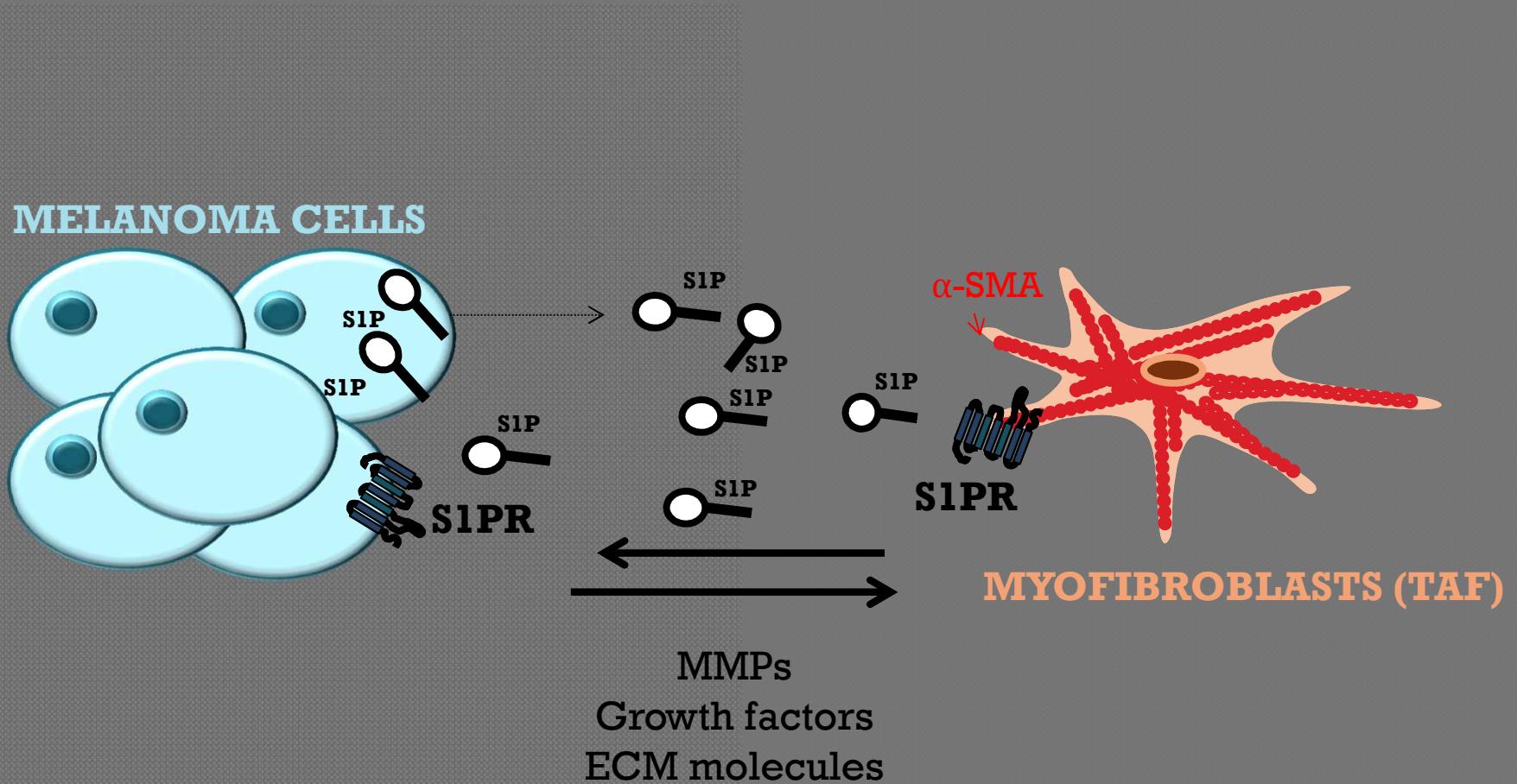
Histological subtypes
SSM = Superficial Spreading Melanoma
NMM = Nodular Melanoma
ALMM = Acral Lentiginous Melanoma
LMM = Lentigo Maligna Melanoma



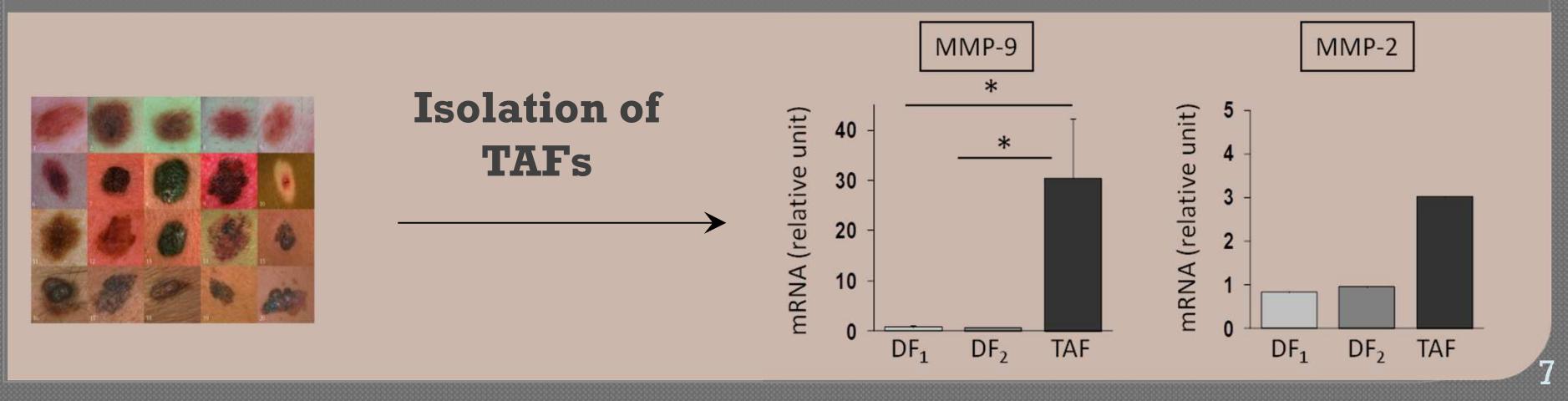
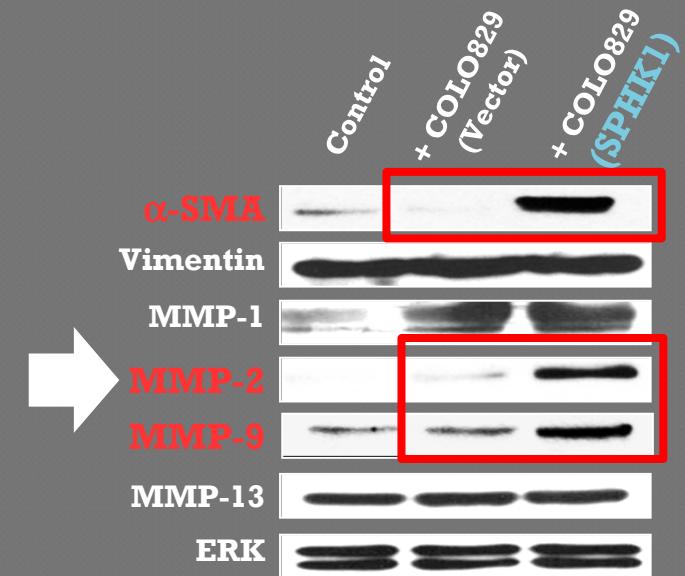
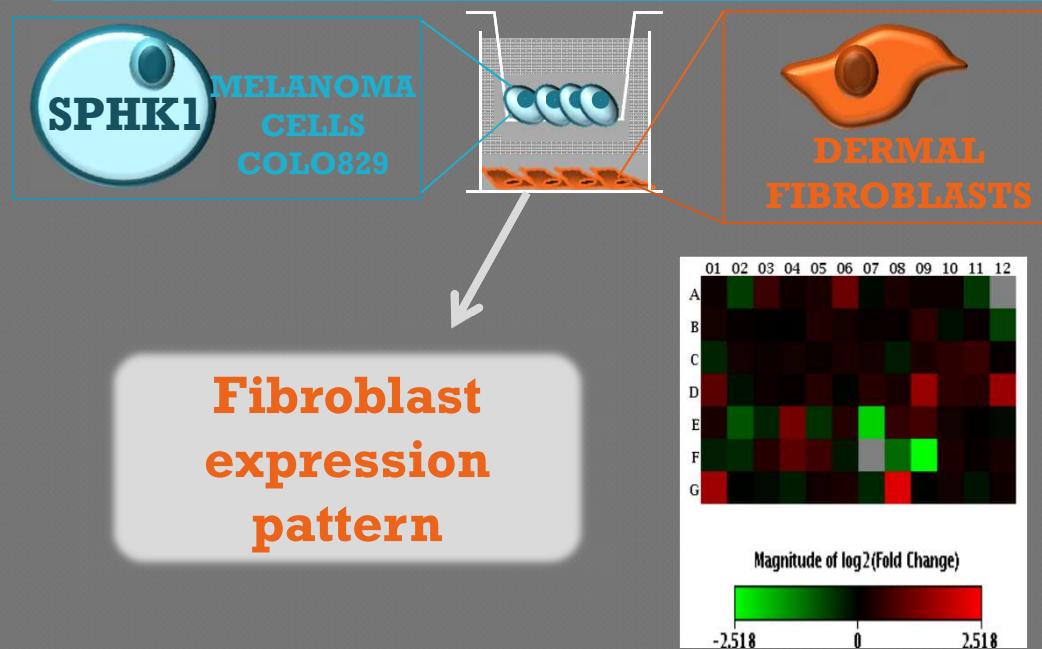
SPHK1 in tumor cells does not regulate melanoma migration



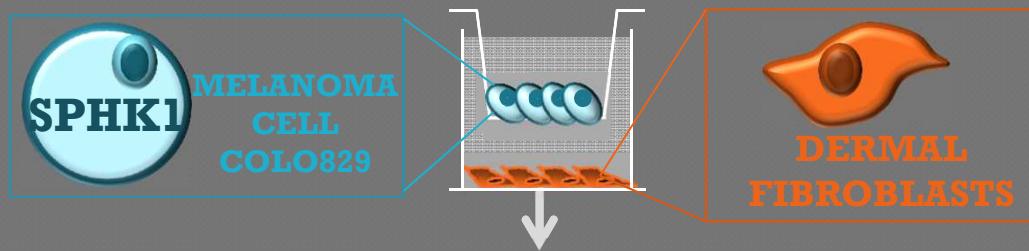
What is the role of S1P in melanoma-stroma interactions?



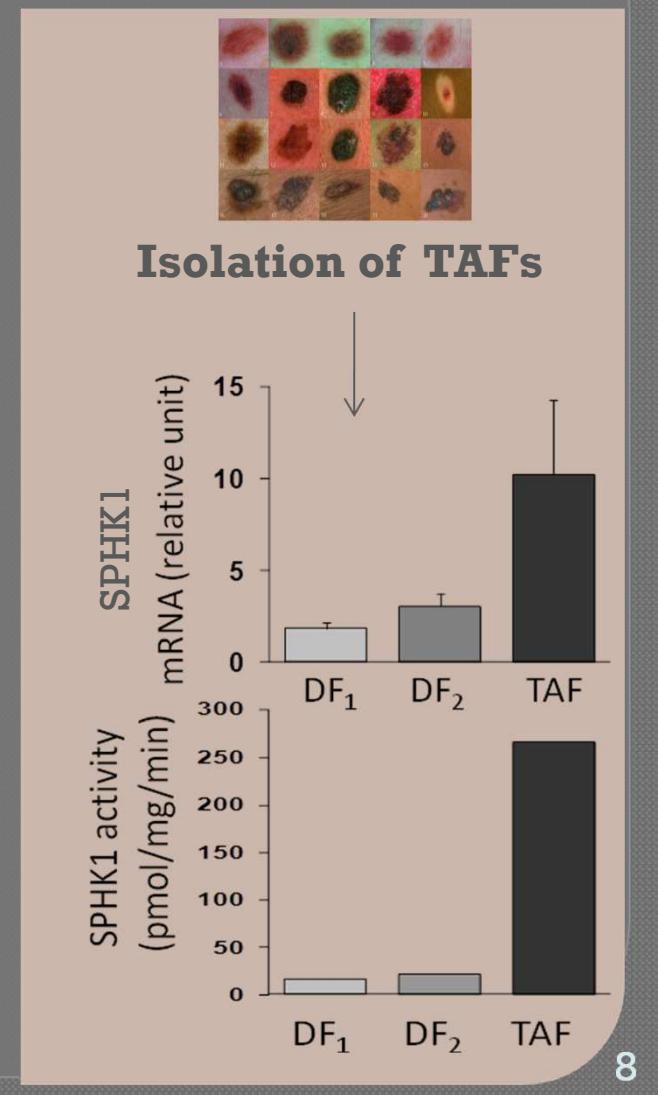
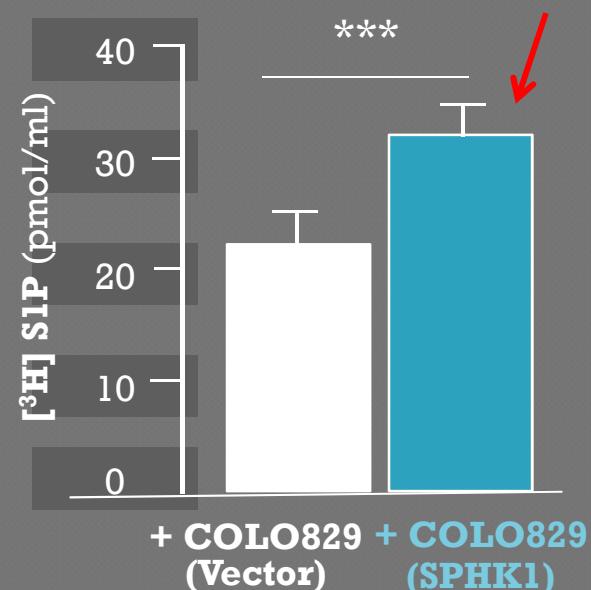
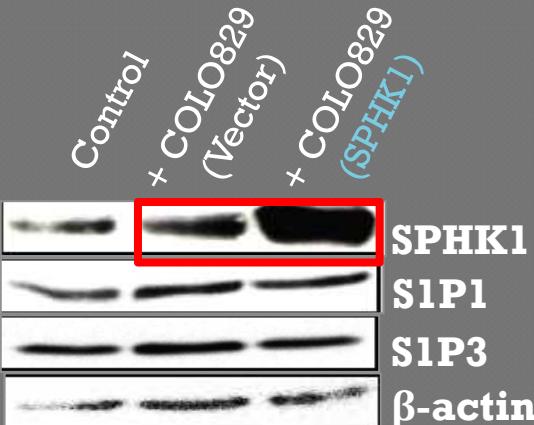
Expression of SPHK1 in melanoma cells stimulates differentiation of dermal fibroblasts



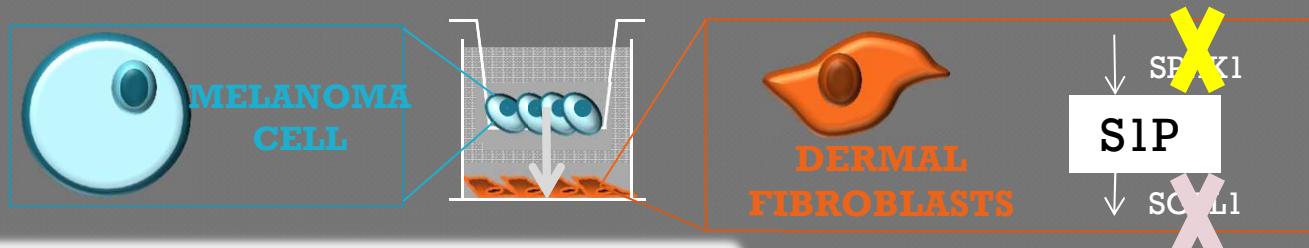
SPHK1 expressed in melanoma regulates S1P metabolism and secretion in fibroblasts



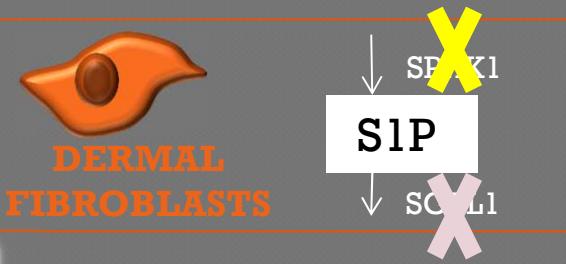
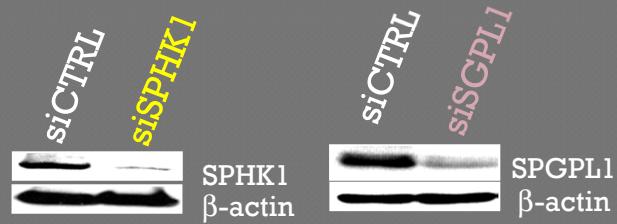
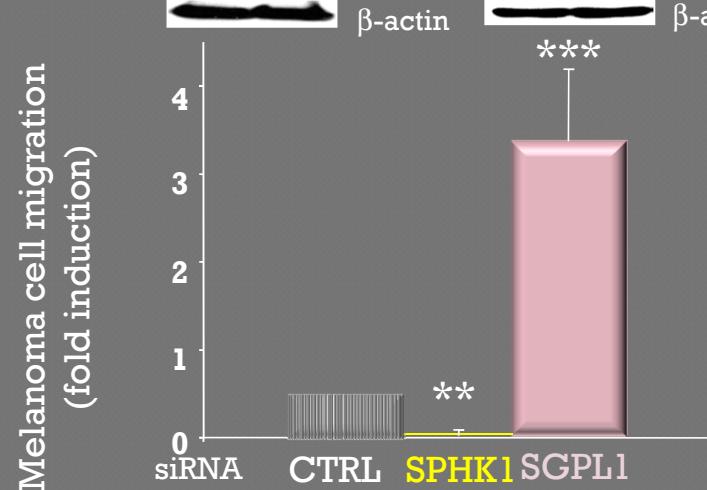
Fibroblasts expression pattern



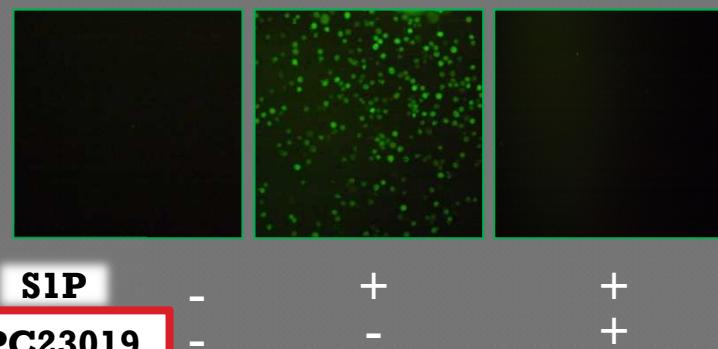
Fibroblast-derived S1P modulates melanoma cell migration



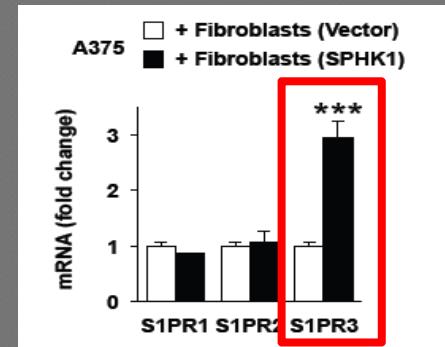
Melanoma cell migration



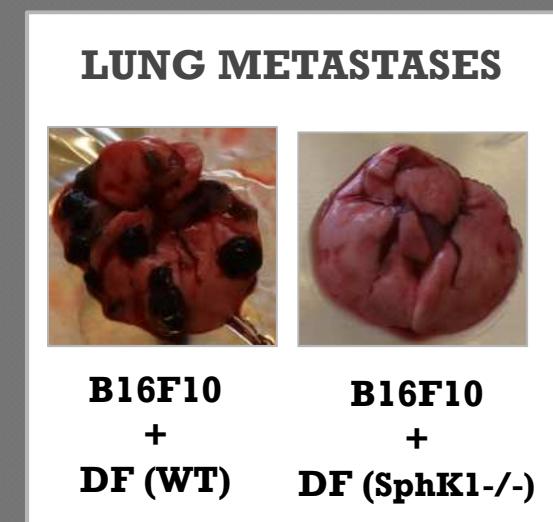
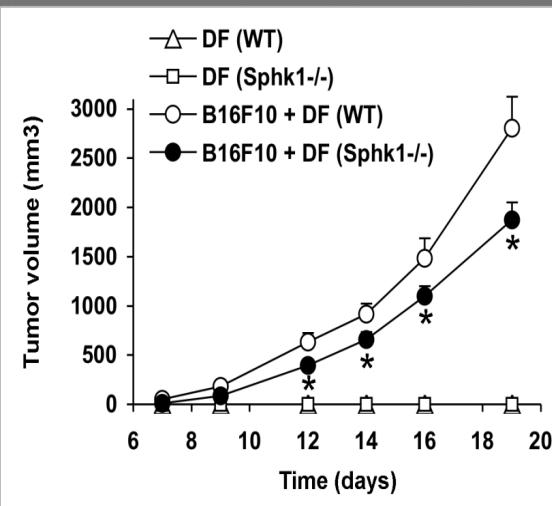
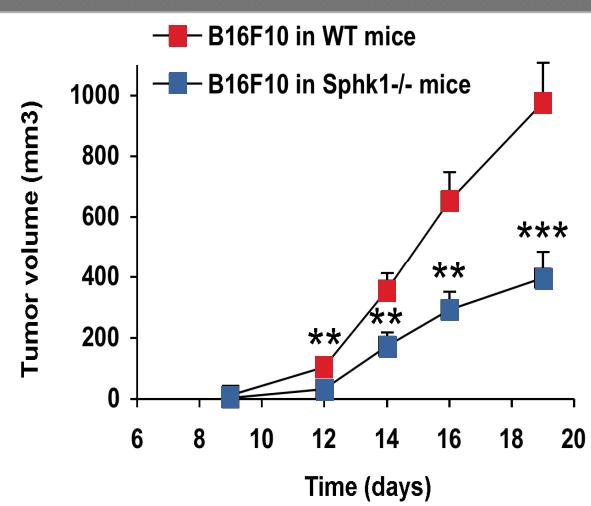
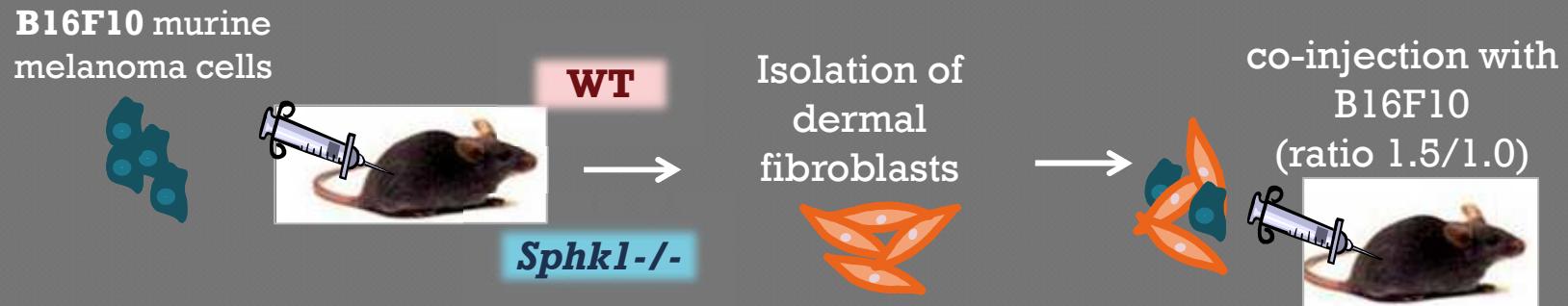
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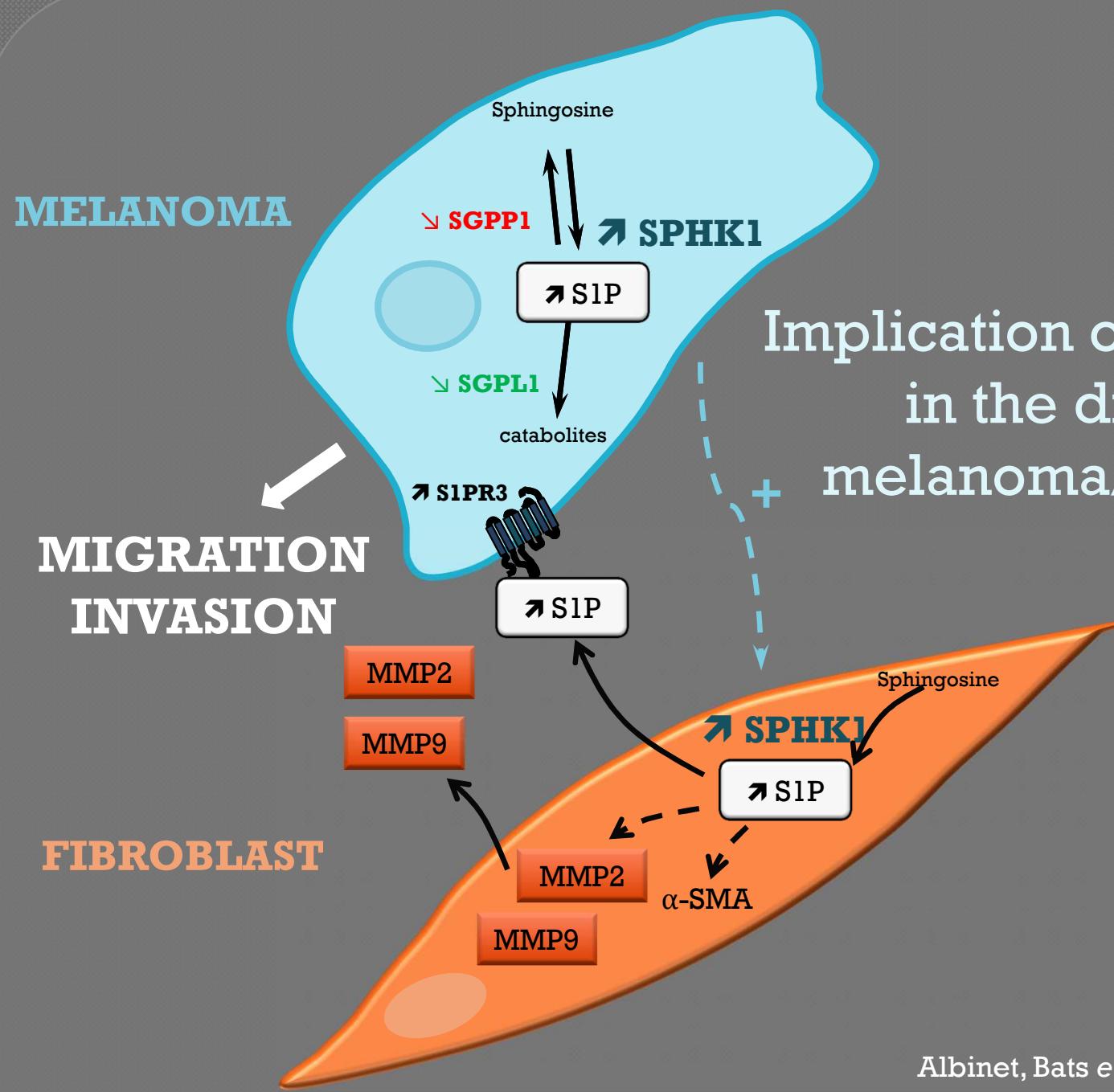


S1P
VPC23019



SPHK1 expression in fibroblasts drives melanoma tumor development





Implication of SPHK1/S1P
in the dialogue
melanoma/fibroblast



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Thanks to collaborators: Institut Claudius Regaud of Toulouse, University of Bern and
Institut de Quimica avancada de Catalunya