



# The vimentin-tubulin binding site peptide (Vim-TBS.58-81) crosses the plasma membrane and enters the nuclei of human glioma cells

Submitted by Emmanuel Lemoine on Fri, 03/20/2015 - 12:46

Titre	The vimentin-tubulin binding site peptide (Vim-TBS.58-81) crosses the plasma membrane and enters the nuclei of human glioma cells
Type de publication	Article de revue
Auteur	Balzeau, Julien [1], Peterson, Alan [2], Eyer, Joël [3]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2012
Langue	Anglais
Date	2012/02/14
Numéro	1
Pagination	77 - 83
Volume	423
Titre de la revue	International Journal of Pharmaceutics
ISSN	0378-5173
Mots-clés	Cell-penetrating peptide [4], Glioblastoma [5], Nuclear localization [6], Tubulin-binding site [7], Vimentin [8]
Résumé en anglais	Cell-penetrating peptides (CPPs) can translocate through the plasma membrane and localize in different cell compartments providing a promising delivery system for peptides, proteins, nucleic acids, and other products. Here we describe features of a novel cell-penetrating peptide derived from the intermediate filament protein vimentin, called Vim-TBS.58-81. We show that it enters cells from a glioblastoma line via endocytosis where it distributes throughout the cytoplasm and nucleus. Moreover, when coupled to the pro-apoptogenic peptide P10, it localizes to the nucleus inhibiting cell proliferation. Thus, the Vim-TBS.58-81 peptide represents an effective vector for delivery of peptides and potentially a broad range of cargos to the nucleus.
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua9023">http://okina.univ-angers.fr/publications/ua9023</a> [9]
DOI	10.1016/j.ijpharm.2011.04.067 [10]
Lien vers le document	<a href="http://dx.doi.org/10.1016/j.ijpharm.2011.04.067">http://dx.doi.org/10.1016/j.ijpharm.2011.04.067</a> [10]

## Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=10466](http://okina.univ-angers.fr/publications?f[author]=10466)  
[2] [http://okina.univ-angers.fr/publications?f\[author\]=15916](http://okina.univ-angers.fr/publications?f[author]=15916)  
[3] <http://okina.univ-angers.fr/joel.eyer/publications>

- [4] [http://okina.univ-angers.fr/publications?f\[keyword\]=14626](http://okina.univ-angers.fr/publications?f[keyword]=14626)
- [5] [http://okina.univ-angers.fr/publications?f\[keyword\]=8332](http://okina.univ-angers.fr/publications?f[keyword]=8332)
- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=14627](http://okina.univ-angers.fr/publications?f[keyword]=14627)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=14628](http://okina.univ-angers.fr/publications?f[keyword]=14628)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=14629](http://okina.univ-angers.fr/publications?f[keyword]=14629)
- [9] <http://okina.univ-angers.fr/publications/ua9023>
- [10] <http://dx.doi.org/10.1016/j.ijpharm.2011.04.067>

Publié sur *Okina* (<http://okina.univ-angers.fr>)