

# Dharmacon™ siRNA *in vivo* References

## A selection of publications demonstrating Dharmacon siRNA for *in vivo* applications:

1. R.H.E. Chong, E. Gonzalez-Gonzalez, et al. Gene silencing following siRNA delivery to skin via coated steel microneedles: *In vitro* and *in vivo* proof-of-concept. *Journal of Controlled Release* 166(3), 211-219 (2013).  
• **Dharmacon™ Accell™ siRNA delivered by microneedle treatment to paws (mouse)**
2. C. Cheng, R. Haasdijk, et al. Endothelial cell-specific FGD5 involvement in vascular pruning defines neovessel fate in mice. *Circulation* 125(25), 3142-3158 (2012).  
• **Accell siRNA delivered by intravitreal injections into the eye (mouse)**
3. H. Nakajima, T. Kubo, et al. A rapid, targeted, neuron-selective, *in vivo* knockdown following a single intracerebroventricular injection of a novel chemically modified siRNA in the adult rat brain. *J. Biotechnol.* 157(2), 326-333 (2012).  
• **Accell siRNA delivered by injection into the cortical region of the brain (rat)**
4. P.A. Singleton, T. Mirzapoozova, et al. High-molecular-weight hyaluronan is a novel inhibitor of pulmonary vascular leakiness. *Am. J. Physiol. Lung. Cell Mol. Physiol.* 299, L639-L651 (2010).  
• **Dharmacon™ siSTABLE™ siRNA delivered by intrajugular ACE antibody-conjugated liposomal delivery (mouse)**
5. M. Snapyan, M. Lemasson, et al. Vasculature guides migrating neuronal precursors in the adult mammalian forebrain via brain-derived neurotrophic factor signaling. *J. Neuroscience* 29(13), 4172-4188 (2009).  
• **siSTABLE siRNA using 7s osmotic pump into carotid artery (mouse)**
6. H. Watanabe, H. Saito, et al. Activation of phosphatidylinositol-3 kinase regulates pancreatic duodenal Homeobox-1 in duct cells during pancreatic regeneration. *Pancreas* 36(2):153-159 (2008).  
• **siSTABLE siRNA delivered by hydrodynamic tail vein injection (mouse)**
7. S.D. Larson, L.N. Jackson, et al. Effectiveness of siRNA uptake in target tissues by various delivery methods. *Surgery* 142(2), 262-269 (2007).  
• **Fluorescent-labeled siRNA; a comparison of delivery by hydrodynamic IV injection, standard IV injection, intraperitoneal administration and rectal administration (mouse)**
8. N.C. Henderson, A.C. Mackinson, et al. Galectin-3 regulates myofibroblast activation and hepatic fibrosis. *Proc. Natl. Acad. Sci. U S A* 103(13), 5060-5065 (2006).  
• **siSTABLE siRNA delivered by hydrodynamic tail vein injection (mouse)**
9. A. DiFeo, F. Huang et al. KLF6-SV1 Is a Novel Antiapoptotic Protein That Targets the BH3-Only Protein NOXA for Degradation and Whose Inhibition Extends Survival in an Ovarian Cancer Model. *Cancer Research* 69, 4733-41 (2009)  
• **Accell siRNA delivered to tumor via intraperitoneal injection (mouse)**
10. MP Zafra, C. Mazzeo et. al. Gene Silencing of SOCS3 by siRNA Intranasal Delivery Inhibits Asthma Phenotype in Mice. *PLOS ONE* 9(3) 1-11 (2014)  
• **Accell siRNA delivered intranasally to lungs (mouse)**
11. H. Xu, TW. Rosler et. al. Tau Silencing by siRNA in the P301S Mouse Model of Tauopathy. *Current Gene Therapy* 14, 343-351 (2014)  
• **Accell siRNA delivered via intracerebral stereotactic injection to brain (mouse)**
12. K.A. Mitchnick, S. Creighton, et. al. Differential contributions of *de novo* and maintenance DNA methyltransferases to object memory processing in the rat hippocampus and perirhinal cortex - a double dissociation. *European Journal of Neuroscience*, 1-14 (2014)  
• **Accell siRNA delivered via intracranial cannula infusion (rat)**
13. Lei Huang et al. Phosphoinositide 3- Kinase Gamma Contributes to Neuroinflammation in a Rat model of Surgical Brain Injury. *The Journal of Neuroscience*, 35(29): 10390-10401 (2015) [rat brain, intracerebroventricular administration]
14. Hidemitsu Nakajima et al. Nuclear-translocated Glyceraldehyde-3-phosphate Dehydrogenase Promotes Poly(ADP-ribose) Polymerase-1 Activation during Oxidative/Nitrosative Stress in Stroke. *The Journal of Biological Chemistry*, Vol. 290 No. 23 (14493-14503)(2015) [rat brain – intracerebroventricular injection]

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