

2009 Society for Neuroscience Meeting - Booth 619

This year's Society for Neuroscience meeting is being held in Chicago, Illinois. ATS is located at **Booth 619** and we'll be there Saturday, October 17 through Wednesday, October 21. We hope you'll stop by and see us. Be sure to check out all the posters that feature targeted toxins. There are 37 this year. We do our best to find all of them, but please let us know if yours was left out. It is very helpful for abstract and journal articles to include the word 'saporin' somewhere in the abstract or text.

We have a listing posted on our website at: www.ATSBio.com/SfN2009posters

You can also pick up an itinerary of poster presentations at our booth. As always, we will be visiting the posters to select this year's Poster of the Year award winner. The next issue of Targeting Trends will feature the winner's research using one or more targeted toxins. The SfN meeting is a great opportunity to interact with other molecular neurosurgeons to discuss your protocols and ideas, and to see what innovative work is being done throughout the world.



Make sure when you visit the booth to also ask for the 2010 calendar and our new 'green' tote bag. See you in Chicago!

Targeting Topics: Recent Scientific References

Reviewed by **Matthew Kohls**

An anti-CD103 immunotoxin promotes long-term survival of pancreatic islet allografts

Zhang L, Moffatt-Bruce SD, Gaughan AA, Wang JJ, Rajab A, Hadley GA
Am J Transplant 9(9):2012-2023, 2009.

The integrin CD103 is suspected of promoting organ allograft rejection and graft-versus-host disease. A custom conjugation was done between the non-depleting CD103 antibody M290 and saporin. The conjugate was administered at 2.0 mg/kg to mice as an intraperitoneal injection (mouse IgG-SAP, Cat. #IT-18, was used as a control). The mice had previously received an islet transplant into a kidney capsule. Mice treated with M290-SAP were effectively depleted of CD103+ cells and had long-term acceptance of the allografts.

Medullary circuitry regulating rapid eye movement sleep and motor atonia

Vetrivelan R, Fuller PM, Tong Q, Lu J
J Neurosci 29(29):9361-9369, 2009.

Data concerning rapid-eye movement (REM) motor atonia in rats have not agreed with results seen in the large amount of data from cats. Here the authors traced the medullary networks in rats involved with the REM function. 120-300-ng injections of orexin-SAP (Cat. #IT-20) were administered to six different sites in the medulla. Ablation of orexin receptor-expressing neurons in one site in the ventromedial medulla resulted in intermittent loss of muscle atonia, indicating

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that glutaminergic neurons in this area are key components of the REM atonia circuit.

The Neurokinin-1 Receptor Modulates the Methamphetamine-Induced Striatal Apoptosis and Nitric Oxide Formation in Mice

Zhu J, Xu W, Wang J, Ali SF, Angulo JA
J Neurochem [Epub Aug 13], 2009.

This study examined the role of neurokinin-1 receptors (NK-1r) on the methamphetamine-induced apoptosis of striatal neurons. 4 ng of SSP-SAP (Cat. #IT-11) or the control, saporin (Cat. #PR-01), was administered to the striatum of mice. Ablation of NK-1r-expressing striatal neurons resulted in a significant reduction of methamphetamine-induced apoptosis. The data suggest that the NK-1r circuitry in the striatum may be a target for treatment of methamphetamine abuse.

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Starting a new lab? Waiting for equipment?

Let us test your materials for you. ATS is expert at conducting *in vitro* assays with targeted toxins. Send us your primary antibody, peptide or protein, ligand, or lectin. When the *in vitro* results confirm the desired specificity, ATS can prepare a custom saporin conjugate.

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