NeuroAim™ In Vivo Transduction Reagent

Catalog #: 515203
GENERAL INFORMATION ................................................................. 1

Product Overview ................................................................. 1
Description.............................................................................. 1
Concentration ......................................................................... 1
Host Animal ............................................................................ 1
Purity....................................................................................... 1
Storage Buffer .......................................................................... 1
Procedure Overview........................................................... 2
Contents, Storage and Shelf Life......................................... 2
Required Materials Not Provided......................................... 2
Warnings and Precautions..................................................... 2

PROTOCOL FOR IN VIVO DELIVERY ............................................. 3

Intravenous Injection: ............................................................ 3

FOR IN VITRO DELIVERY ........................................................ 3

Transduction of Adherent Cells for 48-well Plates.

RELATED PRODUCTS................................................................. 3

Transduction reagents......................................................... 4

The NeuroAim™ In Vivo Transduction Reagents are intended for laboratory use only, unless otherwise indicated. This product is NOT for therapeutic use. NeuroAim is a trademark of Bioo Scientific Corporation (BIOO).
Product Overview

The NeuroAim™ In Vivo Transduction Reagent is used for the directed delivery of RNAi agents into neuronal cells. NeuroAim™ In Vivo Transduction Reagent, a proprietary reagent, is able to bind and transduce siRNA to neuronal cells in vivo resulting in efficient gene silencing.

Description

The NeuroAim™ Transduction Reagent crosses the blood-brain barrier to enter the central nervous system and deliver siRNA to the brain. After intravenous injection into mice, NeuroAim™ In Vivo Transduction Reagent delivers siRNA to the neuronal cells, resulting in specific gene silencing within the brain. This reagent provides a safe and noninvasive approach for the delivery of siRNA and potentially other therapeutic molecules across the blood–brain barrier.

Concentration

Lot Specific (see product label for details)

Host Animal

Mouse and rat

Purity

Purified by column chromatography. Product is >90% pure as measured by SDS-PAGE.

Storage Buffer

1X PBS, pH 7.4
Procedure Overview

To generate RNAi agent bound to carrier moiety antibody conjugate, simply mix the RNAi agent with the NeuroAim™ In Vivo Transduction Reagent in the storage buffer and incubate at room temperature for 20 minutes. Following the incubation the conjugate complex can be injected directly into the animal.

Contents, Storage and Shelf Life

The shelf life of the NeuroAim™ Transduction Reagent is 3 months when stored at 4°C.

<table>
<thead>
<tr>
<th>Kit Contents</th>
<th>Amount</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NeuroAim™ In Vivo Transduction Reagent</td>
<td>For 20 injections</td>
<td>4°C</td>
</tr>
<tr>
<td>RNase-Free Sterile water</td>
<td>2 mL</td>
<td>4°C</td>
</tr>
<tr>
<td>Syringes for injections</td>
<td>4</td>
<td>20°C–25°C</td>
</tr>
</tbody>
</table>

Required Materials Not Provided

- 10, 20, 200 and 1000 µL pipettes
- RNase-Free pipette tips

Warnings and Precautions

BIOO strongly recommends that you read the following warnings and precautions. Periodically, optimizations and revisions are made to the components and manual. Therefore, it is important to follow the protocol included with the kit. If you need further assistance, you may contact your local distributor or BIOO at rnai@biooscientific.com.

- Do not use the kit past the expiration date.
- Try to maintain a laboratory temperature of 20°C–25°C (68°F–77°F).
- Caution should be taken when working with animals. Always wear chemical-resistant gloves, safety goggles, and other protective clothing when handling animals.

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PROTOCOL FOR IN VIVO DELIVERY

1. For optimal results, dissolve the RNAi agent in RNase-Free Sterile 1X PBS at a concentration between 5-10 µg/mL. Suggested RNAi agent for each injection should be 50-100 µg. (Most RNAi agents are around 13,000 g/mole).
2. The ratio between the NeuroAim™ In Vivo Transduction Reagent and RNAi agent should be empirically determined by a gel shift assay.
3. Incubate the mixture at room temperature for 20 minutes.
4. Proceed to intravenous injection of the conjugate complex into the animal.

Intravenous Injection:

1. Warm the mouse tail (approximately 10 minutes) using a heat lamp.
2. The mouse should be restrained using a mouse restraining device or by hand.
3. Disinfect the tail using an alcohol swab and slightly rotate the tail to visualize the vein.
4. Once the vein has been located, disinfect the site of injection and insert the needle at a slight angle. Inject slowly (~20 µL/sec) and watch for clearing of the blood in the vein. If a bulge appears in the tail, remove the needle and repeat the process proximal to the previous site.
5. Upon completion remove needle and apply pressure to the injection site.

RELATED PRODUCTS

Transduction Reagents

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NeuroAim™ In Vitro Transduction Reagent (0.4 mL)</td>
<td>515201</td>
</tr>
<tr>
<td>NeuroAim™ In Vitro Transduction Reagent (1 mL)</td>
<td>515202</td>
</tr>
<tr>
<td>MyeloAim™ In Vitro Transduction Reagent (0.4 mL)</td>
<td>515301</td>
</tr>
<tr>
<td>MyeloAim™ In Vitro Transduction Reagent (1 mL)</td>
<td>515302</td>
</tr>
<tr>
<td>MyeloAim™ In Vivo Transduction Reagent (20 injections)</td>
<td>515303</td>
</tr>
<tr>
<td>MaxSuppressor™ In Vivo RNA-LANCER II (20 injections)</td>
<td>3410-01</td>
</tr>
<tr>
<td>siMPLE™ siRNA Delivery Agent (1 mg)</td>
<td>341008-01</td>
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<tr>
<td>siMPLE™ siRNA Delivery Agent (5 mg)</td>
<td>341008-02</td>
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<tr>
<td>Lancefection™ Delivery Agent for Cell Culture (0.75 mL)</td>
<td>341002</td>
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<tr>
<td>Lancefection™ Delivery Agent for Cell Culture (1 mL)</td>
<td>341003</td>
</tr>
<tr>
<td>Lancefection™ Delivery Agent for Cell Culture (1.5 mL)</td>
<td>341004</td>
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