DESCRIPTION

- **Transferrin-Vivo 750** is a fluorescently-labeled protein designed to bind to transferrin receptors over-expressed in cancer cells with rapid proliferation.

CONTENTS

- Each vial contains 24 nmol of **Transferrin-Vivo 750** in dry solid form. **Transferrin-Vivo 750** has been filtered through a 0.2µm filter prior to drying.
- Reconstitute **Transferrin-Vivo 750** with 1.2 mL of 1X PBS before administering to animals.
- The packaged material provides sufficient reagent for imaging approximately 10 mice (weighing ~25 grams each) when using the recommended dose of 2 nmol (in 100 µL of PBS) of **Transferrin-Vivo 750** per mouse.

STORAGE & HANDLING

- Upon receipt, **Transferrin-Vivo 750** should be IMMEDIATELY STORED AT -20 °C AND PROTECTED FROM LIGHT.
- When stored and handled properly, **Transferrin-Vivo 750** in its dry solid form is stable for up to three months.
- Before opening the vial to ensure that all of the solid material is at the bottom of the vial.
- After reconstituting with 1X PBS, gently swirl the solution to ensure that the solid is fully in solution.
- Once reconstituted, **Transferrin-Vivo 750** is stable for up to 14 days when stored at 2-8 °C and protected from light.
- Allow **Transferrin-Vivo 750** imaging agent to equilibrate to room temperature before introducing into animals.

IN VIVO IMAGING AND APPLICATIONS

- The generally recommended procedure for in vivo imaging with **Transferrin-Vivo 750** is administration via intravenous injection and imaging 24 hours post injection.
- The tissue half-life of **Transferrin-Vivo 750** is approximately 24 hours. Repeat injection and imaging may be performed every 4 days for longitudinal studies. It is recommended that a pre-injection baseline image be taken prior to re-injection and imaging if repeat injections are to be performed less than 1 week apart.
- **Transferrin-Vivo 750** enables imaging of HT-29 tumors implanted subcutaneously in nude mice.

**Physical and Spectral Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
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<tbody>
<tr>
<td>MW</td>
<td>~106,000 g mol⁻¹</td>
</tr>
<tr>
<td>Fluorescence emission¹</td>
<td>770 nm</td>
</tr>
<tr>
<td>Absorbance¹</td>
<td>750 nm</td>
</tr>
<tr>
<td>Purity²</td>
<td>&gt;90 %</td>
</tr>
<tr>
<td>Appearance</td>
<td>Blue solid</td>
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</tbody>
</table>

¹ Absorbance and fluorescence maxima in 1x PBS.
² As determined by RP-HPLC, measuring absorbance at 750 nm.

Normalized absorbance (blue) and fluorescence emission (red) spectra of **Transferrin-Vivo 750** in 1X PBS.
NOTES

- Caution: For laboratory use only. This product is intended for animal research only and not for use in humans. It must be used by or directly under the supervision of a technically qualified individual experienced in handling potentially hazardous materials. Please read the Material Safety Data Sheet (MSDS) provided for this product.

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