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ab270228 Europium-Streptavidin

A product of Expedeon, an Abcam company

Applicable to Expedeon product codes 1220-0001, 1220-0120.

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Europium-Streptavidin datasheet:
www.abcam.com/ab270228
(use www.abcam.cn/ab270228 for China, or www.abcam.co.jp/ab270228 for Japan)

For the detection of biotinylated molecules.

This product is for research use only and is not intended for diagnostic use.

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1. Overview

Europium-Streptavidin (ab270228) involves the covalent attachment of the streptavidin to the specially treated surface of 200 nm Europium (Eu) particles, for the detection of biotinylated molecules.

The surface treatment of the particles makes the conjugate resistant to aggregation and the extremely broad Stokes shift of the Eu chelate particle allows you to reach a higher sensitivity in your immunoassay, preventing non-specific fluorescence interference.

The conjugate in this kit is freeze dried. You simply reconstitute the mixture with the Resuspension Buffer provided in the kit and the conjugate is ready to use.

2. Materials Supplied and Storage

Store the conjugate at -20□ C upon receipt. The Resuspension Buffer can be stored at either +4°C or -20°C. Avoid repeated freeze-thaws of reagents.

Item	Quantity		Storage temperature
	80 µL	400 µL	
1x Resuspension Buffer	1 vial	1 vial	-20°C or +4°C
200 nm Europium - Streptavidin conjugate (Lyophilized)	1 vial	1 vial	-20°C

3. Instructions & Applications

Prepare fresh reagents immediately prior to use.

3.1 Resuspension Buffer:

Allow the 1x Resuspension Buffer to warm to room temperature.

3.2 Reconstitution of the 200 nm Europium - Streptavidin conjugate:

- For the 80 µL size: Add 80 µL of 1x Resuspension Buffer to get final 0.5% solids conjugate.
- For the 400 µL size: Add 400 µL of 1x Resuspension Buffer to get final 0.5% solids conjugate.
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3.3 The conjugate is now ready to use.

Δ Note:

- *Once reconstituted, initial conjugate storage at +4°C is recommended.*
- *The Resuspension Buffer added for the reconstitution of the lyophilized mixture is a good storage buffer. Do not store the reconstituted conjugate at -20°C.*
- *Do not expose to light.*

When excited with UV light, the Eu chelate particle shows a maximal absorbance at 365 nm and emission at 610 nm. The large Stokes shift leads to a low background signal and makes the conjugated particle ideal for immunochromatographic assays as well as microwell-based assays.

Because of the extended lifetime of approximately 0.5 milliseconds, the 200 nm Europium - Streptavidin conjugate can be used in a wide range of time-resolved fluorescence applications for the indirect detection of antigens and DNA targets in many biotin/streptavidin interaction based assays.

We recommend that you run the conjugate in a range between 0.005% - 0.0002% solids. However you may need to optimize this according to your application.

4. Typical Data

Data provided **for demonstration purposes only**.

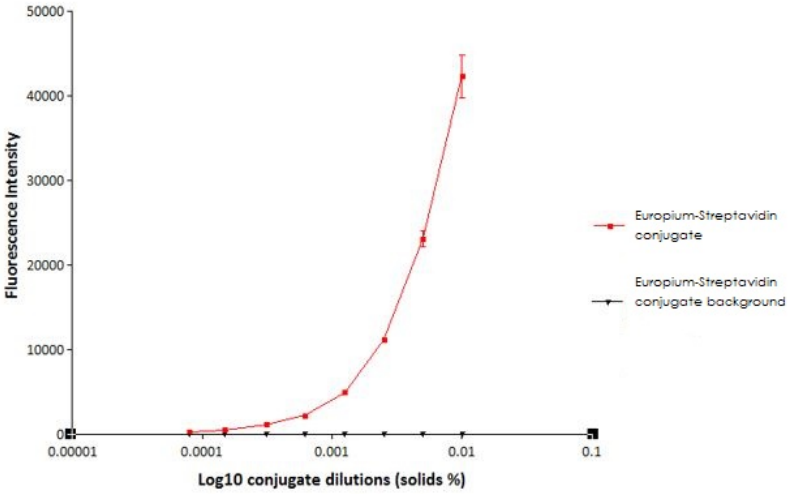

Figure 1. Typical ELISA data with a time resolved fluorescence (TRF) readout. Varying dilutions of Europium–Streptavidin (ab270228) were added to a plate coated with biotinylated ovalbumin, and detected using a plate reader.

5. Notes

Technical Support

For all technical or commercial enquiries please go to:

www.abcam.com/contactus

www.abcam.cn/contactus (China)

www.abcam.co.jp/contactus (Japan)