

STAR FLUOR Secondary Antibodies

for Fluorescent Immunoassays

Overview

Star Fluor secondary antibodies are high quality secondary antibodies designed for use in a variety of immunoassays including cell imaging, flow cytometry and fluorescent western blotting.

These antibodies are highly cross-adsorbed, so ensuring minimal cross-reactivity when using antibodies from different host species. The superior brightness allows the detection of very low amount of proteins with high signal-to-noise ratio.

Features

- Superior brightness for more sensitive detection
- Highly cross-adsorbed antibodies for lower cross-reactivity
- Low background for higher signal-to-noise ratio
- Stable signal for long and repeated exposure

		Target		Application			
		Goat anti-mouse	Goat anti-rabbit	Flow Cytometry	Western Blotting	Cell Imaging - Immunohistochemistry (IHC) - Immunocytochemistry (ICC) - Immunofluorescence (IF)	Fluorescent Immunoassay (FIA)
Fluorophore	Star Fluor488	✓	✓	✓	✓	✓	✓
	Star Fluor550	✓	✓	✓	✓	✓	✓
	Star Fluor645	✓	✓	✓	✓	✓	✓
	Star Fluor680	✓	✓	✓	*	✓	✓
	Star Fluor770	✓	✓	✓	*	✓	✓

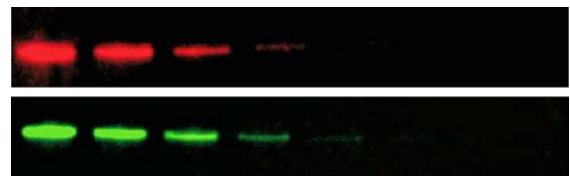
* For western blotting in the infrared region we recommend IR-BLOT 700 and IR-BLOT 800 secondary antibodies.

Applications

Western Blotting

The use of fluorescence in immunoassays allows a fast, reproducible and quantitative detection of the analyte. Fluorescent detection in western blotting offers the following advantages:

- Stable signal for enhanced reproducibility and accuracy in protein quantitation. Blots can be stored and reimaged after months without alteration in signal intensity.
- Wider dynamic range
- Multiplexing: testing multiple targets on the same blot, at the same time.



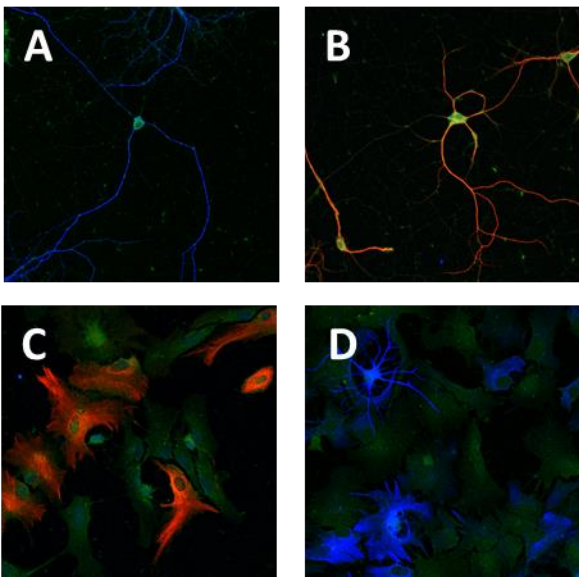
Fluorescent western blotting detection of Human Transferrin with Rabbit anti-human transferrin primary antibody and Star Fluor 550 Goat anti-Rabbit (red), Star Fluor 645 Goat anti-Rabbit (green). Imager: ImageQUANT™ LAS 4000 GEHC

Cell Imaging

Star Fluor secondary antibodies are the perfect choice for cell imaging, offering an outstanding performance:

- Superior brightness for the detection of low expressed proteins with high sensitivity
- Excellent photostability for long and repeated exposure.

Secondary antibodies conjugated with dyes in the Infrared region (Star Fluor 680 and Star Fluor 770) allow reduced scattering and enhanced tissue penetration depth.



(A) Immunohistochemical staining on mouse hippocampal neurons of MAP-2 (blue) using Anti-MAP-2 Primary Antibody and Star Fluor 645 Goat anti-Rabbit and betaIII tubulin (green) using Anti- betaIII tubulin Primary Antibody and Star Fluor 488 Goat anti-Mouse.

(B) Immunohistochemical staining on mouse hippocampal neurons of MAP-2 (red) using Anti-MAP-2 Primary Antibody and Star Fluor 550 Goat anti-Rabbit and betaIII tubulin (green) using Anti- betaIII tubulin Primary Antibody and Star Fluor 488 Goat anti-Mouse.

(C) Immunohistochemical staining on mouse glia of GFAP (red) using Anti-GFAP Primary Antibody and Star Fluor 550 Goat anti-Rabbit and actin (green) using Anti- actin Primary Antibody and Star Fluor 488 Goat anti-Mouse.

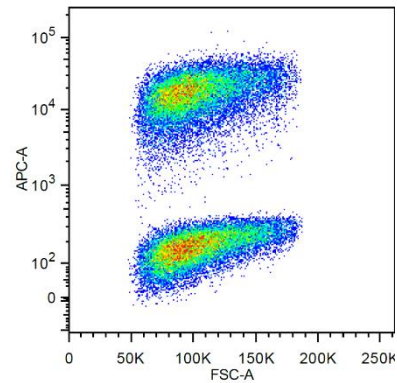
(D) Immunohistochemical staining on mouse glia of GFAP (blue) using Anti- GFAP Primary Antibody and Star Fluor 645 Goat anti-Rabbit and actin (green) using Anti- actin Primary Antibody and Star Fluor 488 Goat anti-Mouse.

TOPRO-3 counterstain (white) is used to stain nuclei in B and C.

Flow cytometry

Star Fluor secondary antibodies can be used for indirect flow cytometry. In this method fluorescent conjugated secondary antibodies are used to bind an unconjugated primary. This approach allows to:

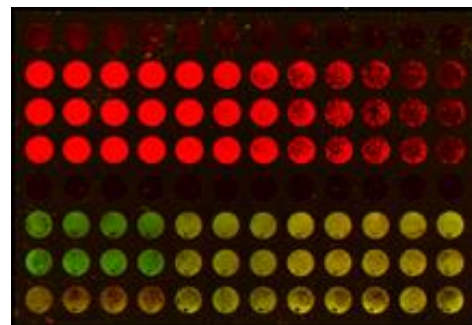
- match the desired probe with any primary antibody
- preserve the active site of the primary antibody
- amplify signal



Flow cytometric analysis of CD-20 staining on EHEB cells. Pseudo-color analysis of pool of cells stained with anti-CD20 Rabbit Monoclonal Primary Antibody and Star Fluor 645 Goat anti-Rabbit secondary antibody or with secondary antibody only.

Fluorescent Immunoassay

Star Fluor secondary antibodies' superior brightness and excellent photostability make them a perfect solution to enhance the performance of your assays. Star Fluor are available in five different colours for multiplex immunoassays enabling the simultaneous analysis of multiple proteins in single samples. They combine the efficiency of multiplexing with the accuracy, sensitivity, reproducibility, and stability of fluorescent detection.



Immunoassay for the phosphorylation status of STAT6 using Primary antibody anti-STA6 (green) anti phosphoTyr641 (red).