SANTA CRUZ BIOTECHNOLOGY, INC.

m-IgG$_1$ BP-CFL 790: sc-533666

BACKGROUND

Mouse IgG$_1$ binding protein (IgG$_1$ BP) conjugated to CruzFluor™ 790 (CFL 790) is a strongly recommended alternative to conventional goat/rabbit anti-mouse IgG secondary antibodies for NIR Western Blotting (WB), immunofluorescence (IF) and flow cytometry (FCM) signal enhancement. CruzFluor™ 790 (CFL 790) is an infrared fluorescent dye that is an excellent substitute for AlexFluor® 790, offering comparable photostability and the ability to resist protein quenching. Suitable for use with Near-Infrared (NIR) imaging systems, such as LI-COR/Odyssey, Invitrogen/iBright and other comparable systems. Mouse IgG$_1$ binding protein is a highly specific reagent that provides strong signal with minimal background and virtually complete elimination of lot to lot variation associated with conventionally generated secondary antibodies. Mouse IgG$_1$ binding protein (m-IgG$_1$ BP) is suitable for binding to most, but not all, mouse IgG$_1$ immunoglobulins, comprising approximately 55% of SCBT's mouse monoclonal antibodies; not suitable for use with mouse monoclonal IgG$_{2a}$, IgG$_{2b}$, IgG$_3$, IgM, IgA and IgE antibodies. It may slightly cross react with mouse IgG$_{2b}$ or goat IgG antibodies. Not cross reactive with human, rat or rabbit IgG antibodies.

SOURCE

m-IgG$_1$ BP-CFL 790 is a purified recombinant mouse IgG$_1$ binding protein conjugated to CruzFluor™ 790 (CFL 790).

PRODUCT

Each vial contains 100 µg mouse IgG$_1$ binding protein-CFL 790 in 0.5 ml of PBS containing 0.1% gelatin and 0.1% sodium azide.

APPLICATIONS

m-IgG$_1$ BP-CFL 790 is recommended for detection of mouse IgG$_1$ by NIR Western Blotting (starting dilution: 1:1000, dilution range: 1:1000-1:10000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:200) and flow cytometry (0.5-1 µg per 1 x 10^6 cells). Optimal dilution to be determined by titration.

For Western Blotting using tissue extracts and m-IgG$_1$ BP-CFL 790, we strongly recommend substracting endogenous immunoglobulins from extracts with Protein G PLUS-Agarose Reagent: sc-2002, to prevent Western Blotting interference when detecting proteins of approximately 25 kDa in size.

RECOMMENDED SUPPORT PRODUCTS

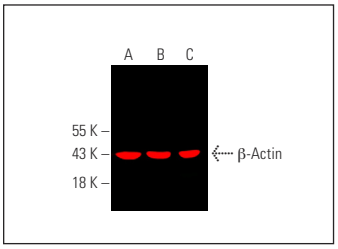
- RIPA Lysis Buffer, 50 ml, cell lysis buffer with protease inhibitors: sc-24948
- Electrophoresis Sample Buffer, 2X, 25 ml, reducing buffer: sc-24945
- Running Buffer, 10X, 1 L, TRIS-Glycine WB running buffer, pH 8.3: sc-24949
- Towbin, with SDS, 10X, 1 L, WB transfer buffer pH 8.3: sc-24954
- TBS Blotto A, lyophilized powder in single-use bottle: sc-2333
- UltraCruz® PVDF Transfer Membrane, 0.45 µm, 30 cm x 3 m roll: sc-3723
- UltraCruz® Nitrocellulose Pure Transfer Membrane, 0.22 µm, 30 cm x 3 m roll: sc-3718
- UltraCruz® Gel Incubation Trays, 100 per pack: sc-201755 (blue), sc-201756 (green), sc-201757 (pink), sc-201758 (yellow), sc-201759 (orange)

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



β-Actin (C4): sc-47778. Near-Infrared western blot analysis of β-Actin expression in HeLa (**A**), MCF7 (**B**) and A-431 (**C**) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG$_1$ BP-CFL 790: sc-533666.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CruzFluor™ SPECTRAL PROPERTIES

PRODUCT	CAT. #	EXCITATION MAXIMUM	EMISSION MAXIMUM
m-IgG Fc BP-CFL 488 m-IgG$_1$ BP-CFL 488	sc-533653 sc-533661	488 nm	514 nm
m-IgG Fc BP-CFL 555 m-IgG$_1$ BP-CFL 555	sc-533654 sc-533662	556 nm	569 nm
m-IgG Fc BP-CFL 594 m-IgG$_1$ BP-CFL 594	sc-533655 sc-533663	587 nm	603 nm
m-IgG Fc BP-CFL 647 m-IgG$_1$ BP-CFL 647	sc-533656 sc-533664	654 nm	669 nm
m-IgG Fc BP-CFL 680 m-IgG$_1$ BP-CFL 680	sc-533657 sc-533665	683 nm	700 nm
m-IgG Fc BP-CFL 790 m-IgG$_1$ BP-CFL 790	sc-533658 sc-533666	786 nm	811 nm