

Cruz Marker™ MW Tag-Alexa Fluor® 680: sc-516730

BACKGROUND

Santa Cruz Biotechnology offers Cruz Marker™ Molecular Weight Standards (sc-2035) for use as internal standards in Western Blotting (WB) applications. The ladder consists of six bands: 132 kDa, 90 kDa, 55 kDa, 43 kDa, 34 kDa and 23 kDa, which appear on the final Western blot image after detection with Cruz Marker™ MW Tag antibodies, which recognize an epitope common to each of the Cruz Marker™ molecular weight standards.

Cruz Marker™ MW Tag is offered in multiple formats to allow direct or indirect enhanced chemiluminescence (ECL), RGB, or Near-Infrared (NIR) fluorescence visualization of the Cruz Marker™ MW Standards in Western Blotting, when used in conjunction with unconjugated kappa light chain mouse monoclonal antibodies, or ImmunoCruz® primary antibodies conjugated to either horseradish peroxidase (HRP), Alexa Fluor® 488, Alexa Fluor® 647, Alexa Fluor® 680 or Alexa Fluor® 790.

Unconjugated Cruz Marker™ MW Tag is a mouse IgG, kappa light chain antibody that can be detected using SCBT's mouse IgG kappa binding protein (m-IgGκ BP) conjugated to HRP (sc-516102) for Indirect ECL detection, conjugated to CFL-405 (sc-516175), CFL-488 (sc-516176), CFL-555 (sc-516177), CFL-594 (sc-516178) or CFL-647 (sc-516179) for Indirect RGB detection, and conjugated to CFL-680 (sc-516180) or CFL-790 (sc-516181) for Indirect NIR detection.

Cruz Marker™ MW Tag is also available as HRP conjugate for Direct ECL detection, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates for Direct RGB detection, and as Alexa Fluor® 680 and Alexa Fluor® 790 conjugates, for Direct NIR detection.

CRUZ MARKER™ MW TAG ANTIBODIES

PRODUCT	CAT. #	DETECTION TYPE	USE WITH
Cruz Marker™ MW Tag-Alexa Fluor® 488	sc-516790	Direct RGB detection	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 488, 546 or 647.
Cruz Marker™ MW Tag-Alexa Fluor® 647	sc-516791	Direct RGB detection	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 488, 546 or 647.
Cruz Marker™ MW Tag-Alexa Fluor® 680	sc-516730	Direct NIR detection	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 680 or 790
Cruz Marker™ MW Tag-Alexa Fluor® 790	sc-516731	Direct NIR detection	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 680 or 790
Cruz Marker™ MW Tag-HRP	sc-516732	Direct ECL detection	ImmunoCruz® primary antibody conjugated to HRP

PRODUCT

Each vial provided at 500 µl; sufficient for 50 gels. Contains Alexa Fluor® 680-conjugated mouse IgG kappa light chain antibody in PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cruz Marker™ MW Tag-Alexa Fluor® 680 is recommended for Direct Near-Infrared Fluorescent detection of Cruz Marker™ Molecular Weight Standards (sc-2035) in Western Blotting, when using ImmunoCruz® primary antibodies conjugated to either Alexa Fluor® 680 or Alexa Fluor® 790.

Cruz Marker™ MW Tag-Alexa Fluor® 680 is not recommended for use with primary antibodies conjugated to Alexa Fluor® 647 due to spectral overlap.

PROCEDURE

Mix the Alexa Fluor® 680- or Alexa Fluor® 790-conjugated ImmunoCruz® primary antibody and the Cruz Marker™ MW Tag-Alexa Fluor® 790 in UltraCruz® Blocking Reagent (sc-516214). Incubate membrane in this mixture for 2 hours at room temperature, in the dark, with shaking. Wash membrane and proceed with NIR imaging.

Cruz Marker™ MW Tag-Alexa Fluor® 680 starting dilution: 1:1000; dilution range: 1:1000-1:2000.

Alexa Fluor® 680- or Alexa Fluor® 790-conjugated ImmunoCruz® primary antibody starting dilution: 1:100, dilution range: 1:100-1:1000.

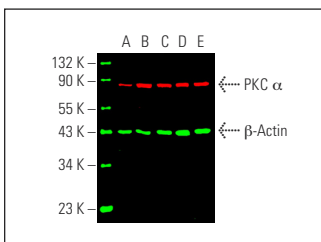
Optimal dilutions to be determined by titration.

For optimal NIR detection, use Immobilon®-FL PVDF (sc-516541), and UltraCruz® Blocking Reagent (sc-516214) for both blocking and antibody dilutions. All NIR steps should be performed in the dark.

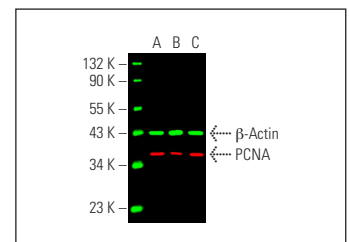
RECOMMENDED SUPPORT PRODUCTS

- Cruz Marker™ Molecular Weight Standards: sc-2035
- Immobilon®-FL PVDF Membrane: sc-516541
- UltraCruz® Blocking Reagent: sc-516214
- Electrophoresis Sample Buffer, 2X, 25 ml, reducing buffer: sc-24945
- UltraCruz® Gel Incubation Trays: sc-201755 (blue), sc-201756 (green), sc-201757 (pink), sc-201758 (yellow), sc-201759 (orange)

DATA



Simultaneous direct near-infrared western blot analysis of PKC α expression, detected with PKC α (H-7) Alexa Fluor® 790: sc-8393 AF790 and β-Actin expression, detected with β-Actin (C4) Alexa Fluor® 680: sc-47778 AF680 in HeLa (A), Jurkat (B), MOLT-4 (C), NIH/3T3 (D) and 3611-RF (E) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 680: sc-516730.



Simultaneous direct near-infrared western blot analysis of PCNA expression, detected with PCNA (PC10) Alexa Fluor® 790: sc-56 AF790 and β-Actin expression, detected with β-Actin (C4) Alexa Fluor® 680: sc-47778 AF680 in HeLa (A), Raji (B) and MOLT-4 (C) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 680: sc-516730.

STORAGE

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

RESEARCH USE

For research use only, not for use in diagnostic procedures

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