SANTA CRUZ BIOTECHNOLOGY, INC.

Cruz Marker™ MW Tag-Alexa Fluor® 488: sc-516790



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 chemiluminescense (ECL), RGB, or Near-Infrared (NIR) fluorescense 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 MarkerTM MW Tag is a mouse IgG, kappa light chain antibody that can be detected using SCBT's mouse IgG kappa binding protein (m-IgG κ 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 MARKERTM 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 μ l; sufficient for 50 gels. Contains Alexa Fluor[®] 488-conjugated mouse lgG kappa light chain antibody in PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cruz Marker[™] MW Tag-Alexa Fluor[®] 488 is recommended for Direct RGB detection of Cruz Marker[™] Molecular Weight Standards (sc-2035) in Western Blotting, when using ImmunoCruz[®] primary antibodies conjugated to either Alexa Fluor[®] 488, Alexa Fluor[®] 546, Alexa Fluor[®] 594 or Alexa Fluor[®] 647.

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

PROCEDURE

Mix the Alexa Fluor[®] 488-, Alexa Fluor[®] 546-, Alexa Fluor[®] 594- or Alexa Fluor[®] 647-conjugated ImmunoCruz[®] primary antibody and the Cruz Marker[™] MW Tag-Alexa Fluor[®] 488 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 RGB imaging.

Cruz Marker[™] MW Tag-Alexa Fluor[®] 488 starting dilution: 1:1000; dilution range: 1:1000-1:2000.

Alexa Fluor[®] 488-, Alexa Fluor[®] 546-, Alexa Fluor[®] 594- or Alexa Fluor[®] 647-conjugated ImmunoCruz[®] primary antibody starting dilution: 1:100, dilution range: 1:100-1:1000.

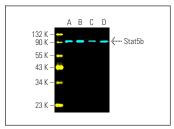
Optimal dilutions to be determined by titration.

For optimal RGB detection, use Immobilon[®]-FL PVDF (sc-516541), and UltraCruz[®] Blocking Reagent (sc-516214) for both blocking and antibody dilutions. All RGB 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



A B C D E 132 K - -90 K - -43 K - -23 K - -23 K - -23 K - -

Stat5b (G-2) Alexa Fluor® 647: sc-1656 AF647. Direct fluorescent western blot analysis of Stat5b expression in BJAB (A), K-562 (B), HeLa (C) and HEL 92.1.7 (D) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 488: sc-516790.

sc=8018 AFG41, Direct fluorescent western blot analysis of pan-Cytokeratin expression in MCF7 (**A**), HeLa (**B**), SW480 (**C**), A549 (**D**) and HEK293 (**E**) whole cell lysates. Blocked with UltraCruz[®] Blocking Reagent: sc=516214, Cruz Marker[™] Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor[®] 488: sc=516790.

STORAGE

Store at 4° C, **D0 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