SANTA CRUZ BIOTECHNOLOGY, INC.

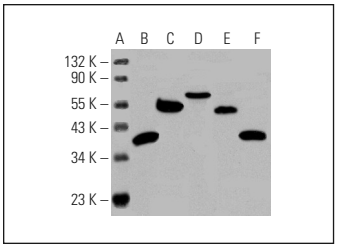
Cruz Marker™ Molecular Weight Standards: sc-2035

PRODUCT

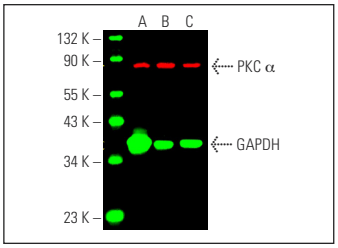
Santa Cruz Biotechnology offers Cruz Marker™ Molecular Weight Standards for use as internal standards in Western blotting applications. The ladder consists of six bands: 132 kDa, 90 kDa, 55 kDa, 43 kDa, 34 kDa and 23 kDa, which appear on the final Western blot film after incubation with Cruz Marker™ compatible Western blotting binding proteins or Cruz Marker™ MW Tag antibodies (see tables in the PROCEDURE section).

Provided at 200 µl, sufficient for 50 gels.

DATA



m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM. Western blot analysis of Cruz Marker™ molecular weight standards (sc-2035) showing MW markers at 132 kDa, 90 kDa, 55 kDa, 43 kDa, 34 kDa and 23 kDa (**A**) and β-Actin (**B**), HSP 60 (**C**), Ku-70 (**D**), α Tubulin (**E**), and ERK 2 (**F**) expression in HeLa whole cell lysate.



Simultaneous direct near-infrared western blot analysis of PKC α expression, detected with PKC α (H-7) Alexa Fluor® 790: sc-8393 AF790 and GAPDH expression, detected with GAPDH (G-9) Alexa Fluor® 680: sc-365062 AF680 in HeLa (**A**), NIH/3T3 (**B**) and KNRK (**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.

SELECT PRODUCT CITATIONS

1. Guan, Z.Z., et al. 2000. Decreased protein levels of nicotinic receptor subunits in the hippocampus and temporal cortex of patients with Alzheimer's disease. J. Neurochem. 74: 237-243.
2. Darreh-Shori, T., et al. 2004. Long-lasting acetylcholinesterase splice variations in anticholinesterase-treated Alzheimer's disease patients. J. Neurochem. 88: 1102-1113.
3. Bose, S.K., et al. 2006. Identification of Ebp1 as a component of cytoplasmic bcl-2 mRNP complexes. Biochem. J. 396: 99-107.
4. Wittlinger, M., et al. 2007. Time and dose-dependent activation of p53 serine 15 phosphorylation among cell lines with different radiation sensitivity. Int. J. Radiat. Biol. 83: 245-257.
5. Silva, M.A., et al. 2008. Intestinal epithelial barrier dysfunction and dendritic cell redistribution during early stages of inflammation in the rat: role for TLR-2 and -4 blockage. Inflamm. Bowel Dis. 14: 632-644.
6. Vila, A.M., et al. 2010. Development of a new magnetic beads-based immunoprecipitation strategy for proteomics analysis. J. Proteomics 73: 1491-1501.

STORAGE

Store the unopened vial of Cruz Marker™ Molecular Weight Standards at -20° C. After thawing, store any unused Cruz Markers at 4° C.

PROCEDURE

Cruz Marker™ Molecular Weight Standards are provided in SDS-PAGE loading buffer and can be loaded directly into an SDS-PAGE gel. Thaw Cruz Markers™ at room temperature. Load 2 µl/well for 0.75 mm gels and 4 µl/well for 1.5 mm gels (based on Hoefer's mighty small mini-gel system; 15 well comb). For different gel systems, the volume to be loaded should be optimized according to the well size.

For Indirect Enhanced Chemiluminescence (ECL) detection using Cruz Marker™ compatible Western blotting binding proteins, incubate the membrane first with primary antibody and then with the appropriate Cruz Marker™ compatible Western blotting binding protein. Develop blot with Western Blotting Luminol Reagent (sc-2048) according to standard protocols.

CRUZ MARKER™ COMPATIBLE BINDING PROTEINS FOR WESTERN BLOTTING

PRODUCT	CAT. #	USE WITH	DETECTION TYPE
m-IgGκ BP-HRP (Cruz Marker)	sc-516102-CM	Mouse IgG kappa light chain monoclonal primary antibody	Indirect ECL detection
m-IgGλ BP-HRP (Cruz Marker)	sc-516132-CM	Mouse IgG lambda light chain monoclonal primary antibody	Indirect ECL detection
mouse anti-goat IgG-HRP (Cruz Marker)	sc-2354-CM	Goat primary antibody	Indirect ECL detection
mouse anti-rabbit IgG-HRP (Cruz Marker)	sc-2357-CM	Rabbit primary antibody	Indirect ECL detection

The above binding proteins are supplied at 200 µg in 0.5 ml volume, to be used in Western blotting at a dilution of 1:500-1:5000. Cruz Marker™ compatible binding proteins recognize an epitope common to each of the Cruz Marker™ Molecular Weight Standards.

For Direct or Indirect Enhanced Chemiluminescence (ECL) detection, or Near Infrared (NIR) Fluorescence detection using Cruz Marker™ MW Tag antibodies, incubate the membrane with the appropriate mixture of primary antibody and Cruz Marker™ MW Tag. For indirect ECL and NIR, incubate with the appropiate Binding Protein after (see table below). Develop blot with Western Blotting Luminol Reagent (sc-2048) or proceed with NIR imaging as appropriate.

CRUZ MARKER™ MW TAG ANTIBODIES

PRODUCT	CAT. #	USE WITH	DETECTION TYPE
Cruz Marker™ MW Tag (unconjugated)	sc-516729	Mouse IgG kappa light chain monoclonal antibody	Indirect ECL detection with m-IgGκ BP-HRP (sc-516102) Indirect NIR detection with m-IgGκ BP-CFL 680 (sc-516180) Indirect NIR detection with m-IgGκ BP-CFL 790 (sc-516181)
Cruz Marker™ MW Tag-Alexa Fluor® 680	sc-516730	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 680	Direct NIR detection
Cruz Marker™ MW Tag-Alexa Fluor® 790	sc-516731	ImmunoCruz® primary antibody conjugated to Alexa Fluor® 790	Direct NIR detection
Cruz Marker™ MW Tag-HRP	sc-516732	ImmunoCruz® primary antibody conjugated to HRP	Direct ECL detection

The above Cruz Marker™ MW Tag antibodies are supplied at 0.5 ml volume, to be used in Western blotting at a dilution of 1:1000-1:2000. Cruz Marker™ MW Tag antibodies recognize an epitope common to each of the Cruz Marker™ Molecular Weight Standards. See Cruz Marker™ MW Tag datasheets for detailed product descriptions and protocols.

RESEARCH USE

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