

Datasheet for 18-4416-32**Fluorescent TrueBlot®: Anti-Rabbit IgG DyLight™ 680****Overview**

Description:	Fluorescent TrueBlot®: Anti-Rabbit IgG DyLight™ 680 - 18-4416-32
Item No.:	18-4416-32
Size:	100 µL
Applications:	IP, WB
Reactivity:	Rabbit
Host Species:	Mouse

Product Details

Background:	Rabbit IgG TrueBlot® is a unique DyLight™ 680 conjugated Anti-rabbit IgG monoclonal secondary antibody. Rabbit IgG TrueBlot® enables detection of immunoblotted target protein bands, without hindrance by interfering immunoprecipitating immunoglobulin heavy and light chains. It is easy to generate publication-quality IP/Fluorescent Western Blot data with Rabbit IgG TrueBlot®, simply substitute the conventional DL680 Anti-rabbit IgG blotting reagent with Fluorescent Rabbit TrueBlot® Antibody DyLight™ 680 and follow the prescribed protocol for sample preparation and immunoblotting. Rabbit IgG TrueBlot® is ideal for use in protocols involving immunoblotting of immunoprecipitated proteins. TrueBlot preferentially detects the non-reduced form of rabbit IgG over the reduced, SDS-denatured form of IgG. When the immunoprecipitate is fully reduced immediately prior to SDS-gel electrophoresis, reactivity of Rabbit IgG TrueBlot® with the 55 kDa heavy chains and the 23 kDa light chains of the immunoprecipitating antibody is minimized thereby eliminating interference by the heavy and light chains of the immunoprecipitating antibody in IP/Western blot applications. Applications include studies examining post-translational modification (e.g., phosphorylation or acetylation) or protein-protein interactions.
Synonyms:	Anti-Rabbit IgG DL680, TrueBlot, DL680 TrueBlot ULTRA, DyLight™ 680 TrueBlot, TrueBlot for IP/WB, TrueBlot for immunoprecipitation, TrueBlot for western blotting, Fluorescent TrueBlot, Rb TrueBlot
Host Species:	Mouse
Conjugate:	DyLight™ 680
Clonality:	Monoclonal
Clone ID:	eB182

Format: IgG

F/P Ratio: 3.8

Target Details

Reactivity: Rabbit

Purity/Specificity: Fluorescent Rabbit TrueBlot® Antibody DyLight™ 680 Conjugate was prepared from tissue culture supernatant by Protein G affinity chromatography. Assay by Immunoelectrophoresis resulted in a single precipitin arc against Anti-Rabbit Serum. Reactivity is observed against native Rabbit IgG by both Western blot and ELISA.

Relevant Links:

- [18-4416-32 SDS](#)
- [Fluorescent TrueBlot® Anti-Rabbit IgG DyLight™ 680 IP Western Blot Protocol](#)
- [DyLight™ Antibody Spectra](#)

Application Details

Tested Applications: IP, WB

Application Note: Fluorescent Rabbit TrueBlot® Antibody DyLight™ 680 has been tested in western blot and immunoprecipitation and may also be used for detection in immunoassays that do not employ immunoprecipitation. Fluorescent Rabbit TrueBlot® Antibody DyLight™ 680 is provided as a lyophilized powder. To conserve reagent, we recommend incubating the blots from minigels in sealed bags (removing as much air as possible) with minimal volume (2-3 mLs). If used conservatively at 2.5mLs/blot will yield enough reagent for 40 blots. Note that there are three key procedural considerations: 1. Protein A or G should not be used for the immunoprecipitation. Use of protein A or G beads with the rabbit TrueBlot will result in contaminating bands. For immunoprecipitation, anti-rat IgG beads, or anti-rabbit IgG beads should be used for rat or rabbit immunoprecipitating antibodies, respectively. 2. Immunoprecipitate should be completely reduced. 3. MB-070 Blocking Buffer for Fluorescent Western Blotting should be used as the blocking protein for the immunoblot. All recommended dilutions for listed applications are intended as an initial recommendation, specific conditions for each protein and antibody combination should be specifically optimized by the end user.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

FC: 1:2,000 - 1:10,000

FLISA: User Optimized

IF: 1:500 - 1:2,500

IHC: User Optimized

WB: 1:1000

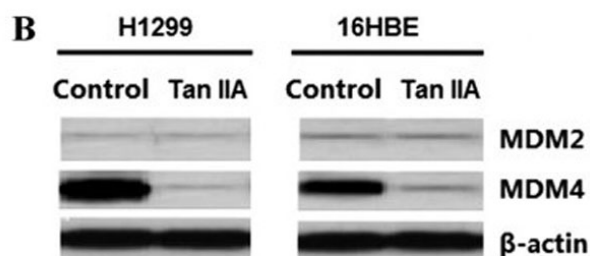
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/ml Polyethylene Glycol (PEG-8000)
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

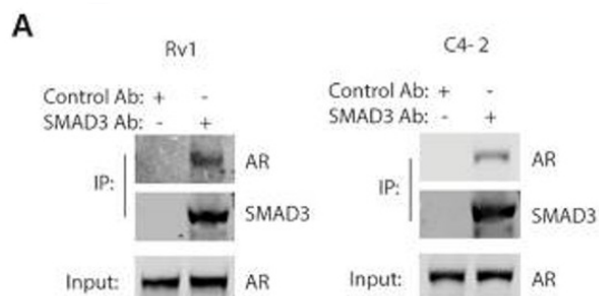
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Tan IIA suppresses MDM4 expression in H1299 and 16HBE cells. (B) MDM2 and MDM4 protein expression in H1299 and 16HBE cells following exposure to 80 μ M Tan IIA for 24 h. Figure 1. PMID: 29207086.

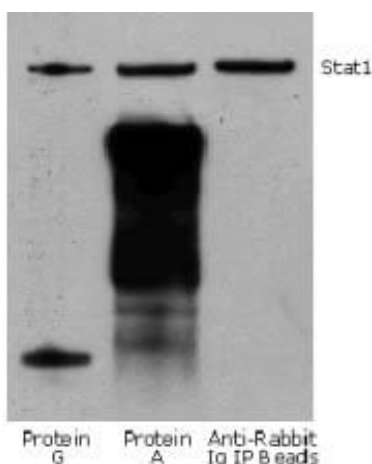


Western Blot

Overlaps of SMAD3 peaks and AR peaks in the ChIP-seq analysis. (A) Co-immunoprecipitation (Co-IP) of AR with SMAD3 in Rv1 or C4-2 cells. SMAD3 was immunoprecipitated from cells and analyzed by western blotting for co-precipitation of AR. TrueBlot secondary antibodies were used in the western blots.

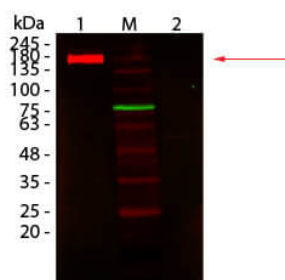
TrueBlot antibodies (Rabbit TrueBlot® ULTRA: Anti-Rabbit IgG HRP, p/n 18-8816-31, Fluorescent TrueBlot®: Anti-Rabbit IgG DyLight™ 680, p/n 18-4416-32).

Fig 5. PMID: 36727462



Western Blot

Rabbit TrueBlot® IP / Western Blot: Jurkat cell lysate (0.5 ml of 1x10⁷ cells/ml) was incubated with rabbit anti-human Stat1 and immunoprecipitated using Protein G, Protein A and Anti-Rabbit Ig IP Beads. Precipitate from 5x10⁵ cells was subjected to electrophoresis, transferred to a PVDF membrane, and Western blotted with anti-Stat1 using Rabbit TrueBlot®: Anti-Rabbit IgG HRP



Western Blot

Western Blot of Fluorescent TrueBlot®: Anti-Rabbit IgG DyLight 680 Conjugated. Lane 1: Rabbit IgG, Non-denatured. Lane 2: Rabbit IgG, Denatured. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: Fluorescent TrueBlot®: Anti-Rabbit IgG DyLight 680 Conjugated antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted: 160 kDa for non-denatured; observed: 170-180 kDa for non-denatured. Band migrates at slightly higher molecular weight.

References

- Jeon HY et al. SMAD3 promotes expression and activity of the androgen receptor in prostate cancer. *Nucleic Acids Res.* (2023)
- Kuonen F et al. c-FOS drives reversible basal to squamous cell carcinoma transition. *Cell Rep.* (2021)
- Kumar S et al. Mammalian hybrid pre-autophagosomal structure HyPAS generates autophagosomes. *Cell.* (2021)
- Zu et al. Tan IIA inhibits H1299 cell viability through the MDM4-IAP3 signaling pathway. *Molecular Medicine Reports* (2018)
- Tian et al. Identification and validation of the role of matrix metalloproteinase-1 in cervical cancer. *International Journal of Oncology* (2018)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.