

Datasheet for 610-145-003

Mouse IgG Fc Antibody DyLight™ 800 Conjugated**Overview**

Description:	Goat Anti-Mouse IgG Fc Antibody DyLight™ 800 Conjugated - 610-145-003
Item No.:	610-145-003
Size:	100 µg
Applications:	Dot Blot, IF, WB
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG F(c) generated in goat is a proteolytic fragment of immunoglobulin G (IgG) obtained by limited digestion with the enzyme papain under controlled conditions of temperature, time and pH. Receptors bind the Fc portion of mouse IgG and often this fragment is removed from immunoglobulins to minimize receptor binding and lower background reactivity.
Synonyms:	Goat Anti Mouse IgG F(c) Antibody DyLight™ 800 Conjugated, Goat Anti-Mouse IgG Fc Antibody DyLight™ 800 Conjugated, Goat Anti Mouse IgG Fc Fragment Antibody DyLight™ 800 Conjugated
Host Species:	Goat
Specificity:	IgG Fc
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.3

Target Details

Reactivity:	Mouse
Immunogen:	Mouse IgG F(c) fragment

Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Mouse IgG, Mouse IgG F(c) and Mouse Serum. No reaction was observed against Mouse IgG F(ab). This antibody will react with heavy chains of Mouse IgG. Minimal reactivity is expected against other Mouse immunoglobulins.
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Application Details

Tested Applications:	Dot Blot
Suggested Applications:	IF, WB (Based on references)
Application Note:	Anti-Mouse IgG F(c) DyLight 800 has been tested by dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

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 Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

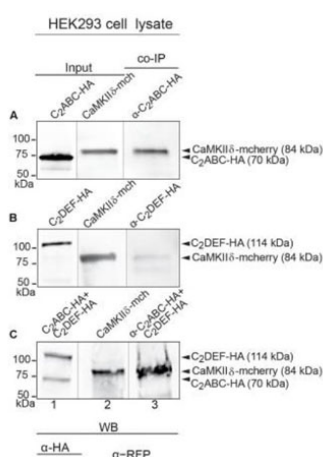
Shipping & Handling

Shipping Condition:	Ambient
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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

Immunoprecipitation and western blot show interaction of otoferlin with CaMKIIδ. (A–C) Two HA-tagged mouse otoferlin fragments, C2ABC (aa 1–632 in NP_001093865; 70 kDa) and C2DEF (aa 933–1920; 114 kDa) were co-transfected with mcherry-tagged mouse CaMKIIδ into HEK293 cells. Transfections were performed either with otoferlin C2ABC and CaMKIIδ (A, Input Lane 1 and 2), otoferlin C2DEF and CaMKIIδ (B, Input Lane 1 and 2) or in the presence of both C2ABC and C2DEF fragments and CaMKIIδ (C, Input Lane 1 and 2). Co-immunoprecipitations of C2ABC-HA and C2DEF-HA were conducted from HEK293 cell lysates using anti-HA antibodies (p/n 600-401-384). CaMKIIδ-mcherry was detected in the eluate using an anti-RFP (red fluorescent protein) antibody (p/n 200-301-379) (A–C, Lane 3), indicating that CaMKIIδ co-precipitated with recombinant otoferlin fragments. Secondary anti-rabbit DyLight680 (p/n 611-144-003) and anti-mouse DyLight800 antibodies (p/n 610-145-003) (1:10,000). FIGURE 5. PMID: 29046633.

Western Blot

DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFα was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

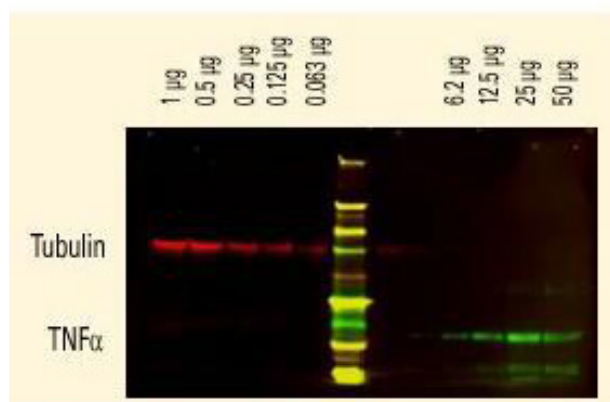
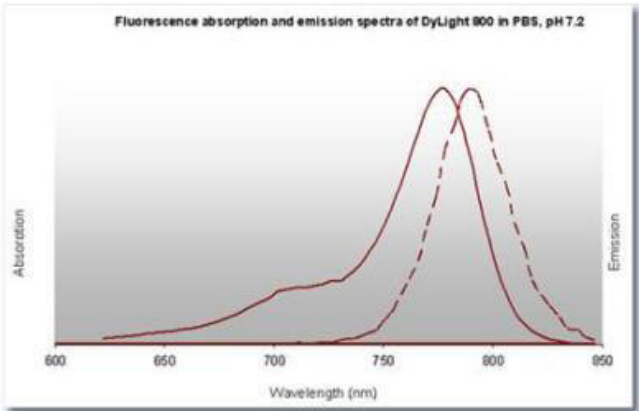


Diagram
Properties of DyLight™ Conjugates.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ϵ (M ⁻¹ cm ⁻¹)	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800



Diagram

References

- Szewczyk B et al. FUS ALS neurons activate major stress pathways and reduce translation as an early protective mechanism against neurodegeneration. *Cell Rep.* (2023)
- Greenstein, R A et al. Local chromatin context regulates the genetic requirements of the heterochromatin spreading reaction. *PLoS Genetics* (2022)
- White Z et al. Effect of Dysferlin Deficiency on Atherosclerosis and Plasma Lipoprotein Composition Under Normal and Hyperlipidemic Conditions. *Front Physiol.* (2021)
- Wang XD et al. Spy1, a unique cell cycle regulator, alters viability in ALS motor neurons and cell lines in response to mutant SOD1-induced DNA damage. *DNA Repair (Amst).* (2019)
- Meese et al. Activity-Dependent Phosphorylation by CaMKII δ Alters the Ca²⁺ Affinity of the Multi-C2-Domain Protein Otoferlin. *Frontiers in Synaptic Neuroscience* (2017)

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.